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COMMERCE

M A G A Z I N E

Does Russia Lead From Weakness? .

The Battle For Titanium

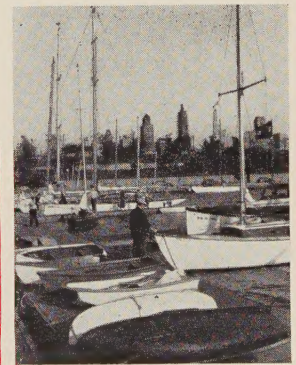
Report To Industry On Japan

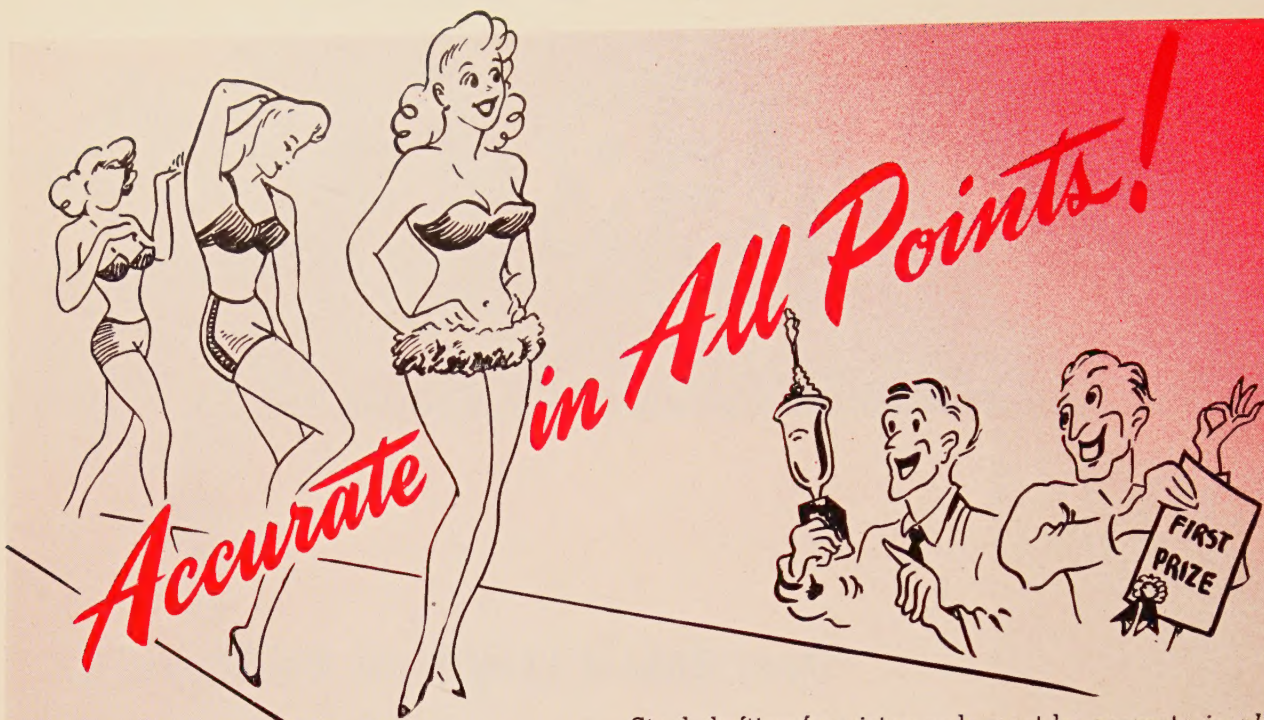
Wanted: Inventions!

Appeal Court For Scarce Material .

AUGUST, 1951

35 CENTS

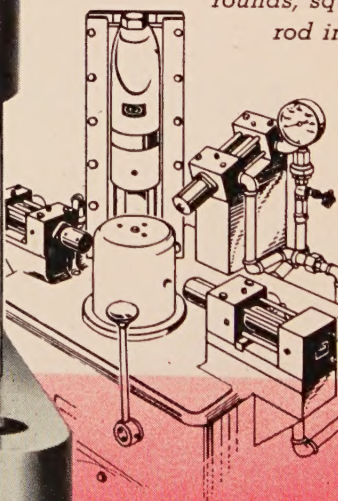
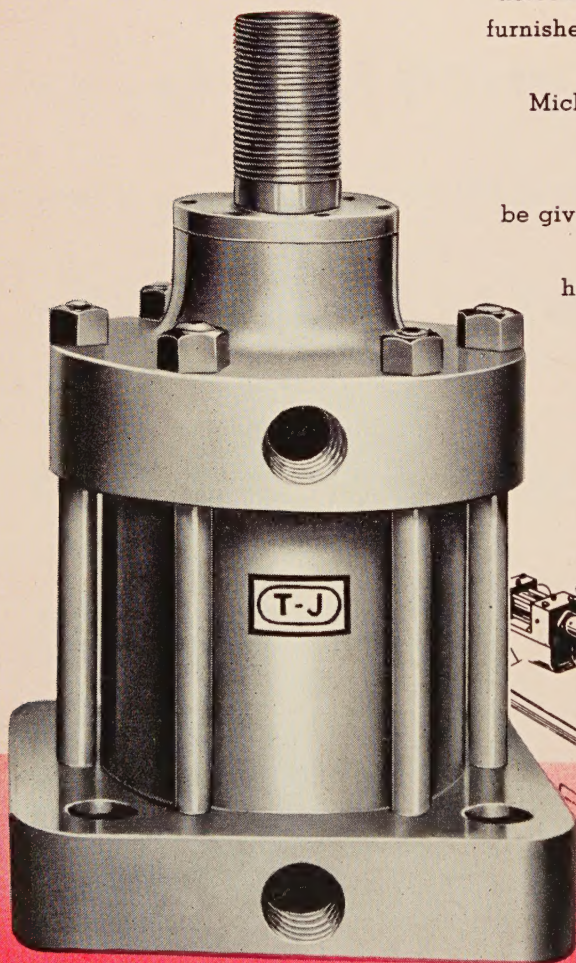




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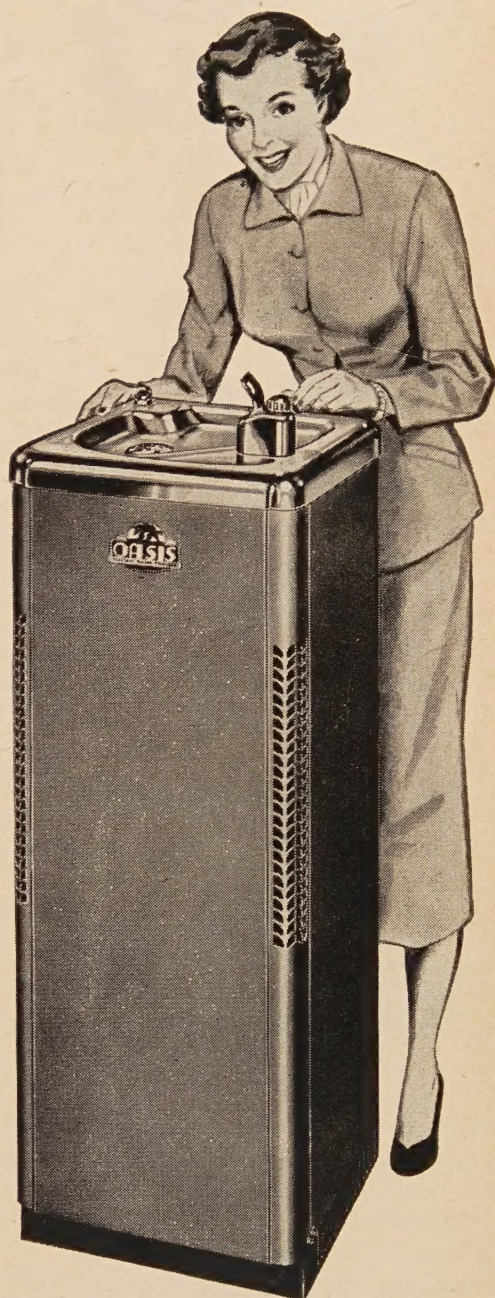
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OASIS

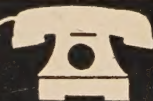


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STATISTICS OF CHICAGO BUSINESS

	June, 1951	May, 1951	June, 1950
Building permits	900	878	1,111
Cost	\$ 21,400,754	\$ 27,124,600	\$ 29,582,211
Contracts awarded on building projects, Cook Co.	1,571	1,670	2,111
Cost	\$ 40,058,000	\$ 44,773,000	\$ 67,529,411
(F. W. Dodge Corp.)			
Real estate transfers	6,924	7,206	8,411
Consideration	\$ 6,098,844	\$ 6,401,346	\$ 6,497,011
Department store sales index	220.1*	238.7	222.1
(Federal Reserve Board)			
(Daily average 1935-39=100)			
Bank clearings	\$ 3,593,321,668	\$ 3,996,171,147	\$ 3,564,911,111
Bank debits to individual accounts:			
7th Federal Reserve District	\$20,227,410,000	\$20,116,362,000	\$18,287,710,000
Chicago only	\$ 9,886,324,000	\$10,099,589,000	\$ 9,151,225,000
(Federal Reserve Board)			
Midwest Stock Exchange transactions:			
Number of shares traded	1,050,000	1,364,000	1,615,000
Market value of shares traded	\$ 35,604,193	\$ 45,115,036	\$ 50,144,411
Railway express shipments, Chicago area	836,600	911,342	1,041,811
Air express shipments, Chicago area	52,000	56,180	59,611
L.C.L. merchandise cars	17,905	20,113	21,511
Electric power production, kwh	1,104,190,000	1,148,800,000	1,039,506,000
Industrial gas sales, therms	11,912,149	10,464,709	9,145,411
Revenue passengers carried by Chicago Transit Authority lines:			
Surface division	49,733,764	52,204,191	53,567,511
Rapid transit division	12,220,850	12,791,814	12,128,811
Postal receipts	\$ 9,331,533	\$ 9,850,134	\$ 9,336,411
Air passengers:			
Arrivals	202,840	201,540	172,111
Departures	210,170	208,073	178,611
Consumers' Price Index (1935-39=100)	191.3†	190.8	170.1
Livestock slaughtered under federal inspection	440,334	489,199	454,911
Families on relief rolls:			
Cook County	22,139	23,139	29,611
Other Illinois counties	13,794	14,837	19,011

*Preliminary figure.

†Figures are on same basis as year ago. New indexes are 190.1 for June 1951 and 189.8 for May, 1951.

SEPTEMBER, 1951, TAX CALENDAR

Date Due	Tax	Returnable to
1	Second installment of 1950 Real Estate taxes becomes delinquent on this date and subject to penalty of one per cent per month thereafter	County Collector
15	If total O.A.B. taxes (employer and employee) plus income tax withheld in previous month exceeds \$100, pay amount to	Authorized Depositor
15	Illinois Retailers' Occupation Tax return and payment for month of August	Director of Revenue
15	Third installment (20%) of 1950 Federal Income Tax by Corporations	Collector of Internal Revenue
15	Payment of one-quarter of 1951 estimated tax found due March 15, or one-third of the balance of 1951 estimated tax found due June 15. (Those required to file declaration for first time, or making revised declaration, pay one-half of the balance of 1951 estimated tax)	Collector of Internal Revenue
30	Federal Excise Tax return and payment due for August, 1951	Collector of Internal Revenue

COMMERCE

M A G A Z I N E

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AUGUST, 1951

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CONTENTS ☆

The Battle For Titanium.....	By Daniel F. Nicholson	13
Defense Program Heading Toward Third Phase: Complete Allocation Control.....	By Jack Robins	15
Report To Industry On Japan (Conclusion).....	By Howard F. Van Zandt	16
Supreme Court For Scarce Materials.....	By Mitchell Gordon	18
Wanted: Inventions!.....	By Benjamin Melnitsky	19
Does Russia Lead From Weakness?.....	By Ernest T. Weir	21

REGULAR FEATURES ☆

Statistics of Chicago Business.....	2
The Editor's Page.....	7
Here, There and Everywhere.....	8
Trends in Finance and Business.....	10
Invest—In the Middle West.....	29
Industrial Developments in the Chicago Area.....	33
Transportation and Traffic.....	37
New Products.....	40
Stop Me—If.....	48

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In This Issue . . .

Titanium has long been known to science as a metal with interesting properties, but exceedingly little utilitarian value to industry. The last several years, however, metallurgists have taken a second look at titanium. It has been found to resist corrosion excellently and to have a high tensile strength. These properties, and the potential applications they suggest for the metal, have set researchers to work looking for economical ways to refine titanium and thereby put it to work on a mass basis. Already considerable progress has been made, as Daniel F. Nicholson reports in an article beginning on page 13.

Howard F. Van Zandt concludes his two-part "Report To Industry On Japan" (p. 16), recounting some of the complex, though at times humorous, problems confronted by Western businessmen in their dealings with the Japanese. To be forewarned is to be forearmed, says Mr. Van Zandt, so he adds a series of practical suggestions for facilitating successful business relations with the "workshop nation" of the East.

One of the most interesting offices in Washington belongs to the National Inventors Council, the government agency that encourages full-time inventors and spare-time putterers to develop such needed inventions as a portable body warmer for arctic soldiers or a device to cover tank tracks in the snow. The council, reports Benjamin Melnitsky (p. 19), turned up a host of war-winning ideas, but it is again looking for new ideas from inventive Americans.

Businessmen who believe they have been unfairly pinched by material controls may now take their case before a new Washington tribunal, the appeals board of the National Production Authority. Your case must be exceptional, however, for the board has turned down more appeals than it has granted. Mitchell Gordon explains the board's functions (p. 18) and reviews some of the appeals it has heard during its first two months of operation.

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COMMERCE MAGAZINE,
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ATTENTION-MR. GORDON RICE, ADVERTISING MANAGER

GENTLEMEN:

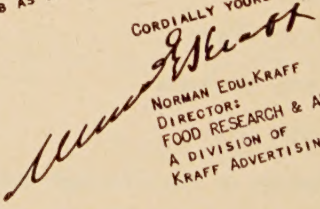
PRIOR TO MAY, 1950, BEFORE WE WERE RETAINED TO HANDLE THE ACCOUNT OF THE AMERICAN NECKWEAR MFG. CO. OF CHICAGO, THE BULK OF THE ADVERTISING APPROPRIATION WAS USED IN DIRECT SELLING PUBLICATIONS.

UPON TAKING OVER THE ACCOUNT, WE IMMEDIATELY MADE A MEDIA ANALYSIS TO DETERMINE THE FEASIBILITY OF USING PUBLICATIONS IN OTHER FIELDS. ONE AMONG SEVERAL SELECTED WAS THE COMMERCE MAGAZINE WHERE QUARTER PAGE COPY WAS USED TO INTEREST MANUFACTURERS AND PRODUCERS IN SPECIALLY DESIGNED MENS TIES UPON WHICH COULD BE PICTURED SINGLE, OR GROUPS OF ARTICLES, TRADE MARKS, SLOGANS AND/OR CHARACTER STUDIES. THESE SPECIALLY DESIGNED TIES WERE NAMED "ADVER-TIES" THE "TIES THAT ADVERTISED THE PRODUCT".

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WE FEEL JUSTIFIED IN ISSUING ANOTHER SCHEDULE OF AMERICAN NECKWEAR ADVERTISING FOR THE COMMERCE MAGAZINE. THIS SHOULD BE IN YOUR HANDS EARLY NEXT WEEK. HOPE IT DOES AS GOOD A JOB AS THE OTHER.

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The Editor's Page

Corporate Tax Collectors

THE National City Bank of New York has made a careful examination of the tax payments of the hundred largest non-financial corporations in the country for 1950. Its findings will prove startling even to those who are informed in a general way.

Space does not permit a listing of the kind of taxes paid. They were almost endless in variety. The total, however, was \$12,203,000,000, which represented 15.9 per cent of the corporations' total sales. In some industries, where excise taxes are extreme, corporate tax payments ranged as high as 67.4 per cent of sales.

The figures show that next to wage earners the tax collectors have, by all odds, the largest vested interest in business. For each hundred dollars paid in wages and salaries by the corporations, \$65 was paid in taxes. Against each dollar of net income the tax collectors took \$2, and their take was four to one against dividends paid.

These latter facts should be of considerable interest to the 7,200,000 registered shareholders who own the 100 corporations. They should be of far greater interest to the ultimate customers of the products and services of the 100 corporations, however. For the bank study leaves little doubt that corporations are merely the collectors through which the taxes they pay are taken from the ultimate consumer.

The bank found that in 1929, when the federal income tax rate was only 11 per cent, U. S. non-financial corporations paid taxes of approximately \$1,100,000,000. They had net income of 5.4 per cent per dollar of sales. In 1949, despite the tremendous increase in federal tax rates and a nine-fold increase in tax payments, net income represented an average margin of 4.4 per cent per sales dollar.

It could be assumed that the one percentage point drop in profit margins between 1929 and 1949 reflected at least partial absorption of the increased tax burden by corporations. Historically, however, the profit margin of American business has been declining under the pressure of free competition. This, rather than tax absorption, is the more likely explanation for the one point drop in the past 20 years.

Inexact Science!

MANY economic forecasters are biting their nails these days because the trend of business is not moving according to Hoyle. With employment and wages at record highs, building and capital investment booming, and job security seemingly indefinitely underwritten by the government's defense program, business is having to push hard to move goods. Not only is trade in the soft lines lackadaisical, it is any-

thing but booming in the most glamorous of consumer durables—home appliances, automobiles and television.

To make matters worse for the art of forecasting, the very opposite situation should prevail. Material cuts are actually beginning to curb production of civilian goods for the first time and buyers, in theory at least, ought to be lining up for merchandise.

The net result of all this is that even government forecasters are reported to be turning chary about predicting even the fourth quarter.

No one can take pleasure in seeing business turn slow. As long as it has, however, there may be a small bit of satisfaction to be found in the fact that the extreme disciples of statistical forecasting and the planned economy are being reminded that economics is not an exact science. For reasons neither statistics nor theory will explain, human behavior en masse has a very disconcerting way of upsetting predictions.

Marshmallows And Marriage

AMONG its many blessings, it seems that residence in the Middle West contributes to marital stability.


This arresting and valuable bit of intelligence has been turned up by the Marshmallow Research Foundation. In a quest for knowledge—and advancement of the status of the marshmallow, of course—the foundation located 300 couples who celebrated their fiftieth wedding anniversary coincident with the June golden anniversary of the marshmallow.

The search for the couples was conducted through hundreds of disc jockeys from coast to coast over radio stations in 40 states. Using the popular songs, "It's a Marshmallow World" and "Anniversary Waltz" to call attention to the occasion, disc jockeys invited couples married 50 years to send their names in to their local radio stations.

We hasten to say that comments on the scientific accuracy of this statistical procedure are not solicited.

All of this, of course, would be of less than passing interest were it not for the fact that our own fair Middle West apparently has the best batting average in matrimony. Some 125 of the 300 fiftieth anniversary couples reside in this favored area. It is a little disconcerting to find that Detroit, with 48 fifty-year married celebrants led Chicago, which had but 43. Sectional pride is restored, however, by the discovery that the disc jockeys failed to turn up a single golden anniversary couple in the Hollywood area. Is anyone surprised?

Alan Sturdy



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• **Vacation Sour Note**—Vacationing motorists are bumping into higher state gasoline taxes this year, according to a melancholy report from Commerce Clearing House indicating that seven states have hiked gas tax rates this year and another four have extended such "temporary" taxes. The heaviest gas taxes are being encountered in the South and West; Louisiana charges the steepest: nine cents a gallon; and Kentucky, Tennessee, North and South Carolina, and Florida each charge seven cents. Seven states west of the Mississippi charge six to 6½ cents tax.

• **Maritime TV**—The 2100 sailors who man Pittsburgh Steamship Company ore boats on the Great Lakes are enjoying television entertainment for the first time this year. The United States Steel Company subsidiary reports that TV receivers, set up in the crew quarters of the big lake boats, do not interfere with the performance of radar or other electrical and electronic navigational equipment. Best point of reception on the boats: the crew mess hall.

• **Record-Keeping Data**—A booklet explaining the record-keeping required of manufacturers operating under the Controlled Materials Plan is being made available by the National Production Authority at Commerce Department field offices. The Chicago field office is at 221 N. LaSalle St., Central 6-7420. The manual, entitled "Allotment Accounting for Consumers Under CMP," explains what records must be maintained to account for allotments of steel, copper and aluminum.

• **Subcontract Spread**—International Harvester Company is subcontracting between 80 and 90 per

cent of the material it requires for prime government contracts, the company reports. In one case 327 subcontractors are participating with Harvester on a large prime contract for armored utility vehicles. These subcontractors in turn have made "sub-contracts" with 1377 additional concerns. As a result, 1705 businesses in all are involved in the job.

• **Jet Engine Center**—A Chicago businessman, James J. Nance, president of Hotpoint, Inc., believes that Chicago may become a permanent center of jet engine production for military, as well as commercial, aircraft. The reason: a jet engine requires large quantities of sheet metal for outer shields and tubing, and Chicago is one of the principal centers of appliance manufacturing which uses great quantities of sheet metal. Two new Hotpoint factories in Chicago, now nearing completion, will be entirely devoted to the production of jet engine components.

• **Packaging Study**—The Munitions Board has begun setting up packaging schools throughout the country, each of which will give two weeks' courses to some 2,000 military and civilian students annually on preservation, packaging, packing, marking and carloading. The only cost to students will be transportation and lodging expenses. Prime and subcontractors to the government may request training applications from the Munitions Board Packaging Agency, Washington 25, D. C.

• **Big Scrap Source?**—Auto-wreckers in Illinois, Indiana and Wisconsin have begun combing over their forlorn graveyards in an attempt to recover as much scrap as possible to help meet the steel

(Continued on page 28)

GAS AT WORK



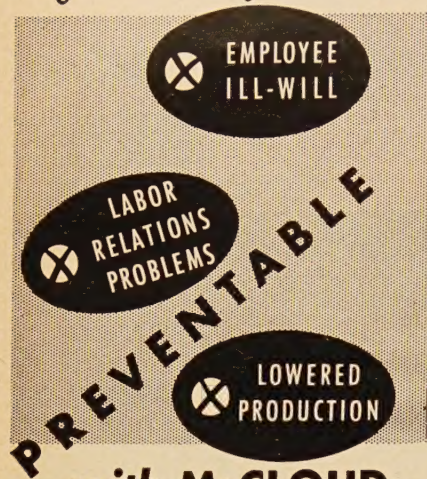
View of all gas-fired kitchen featuring modern stainless steel cooking equipment at Riccardo's Studio Restaurant, 437 N. Rush St., Chicago, Ill.

RICCARDO'S Studio Restaurant, located on Chicago's near North Side, is well-known from coast to coast for its excellent Italian cuisine and Bohemian atmosphere. It is the favorite meeting place of famous artists, distinguished authors and columnists, as well as celebrated stars of radio, stage and screen.

Gas is used exclusively in the preparation of all food, including broiling, baking, roasting, deep fat frying and boiling. Over a period of many years, Riccardo's has found gas to be the ideal fuel for all cooking needs in catering to the varied tastes of such an exacting clientele.

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Trends in FINANCE and BUSINESS

Industrial Accident Rate on Decline

Industry's campaign for safety on the job is a long and frequently unexciting task, but the results of this year-in-year-out drive continue to reflect the wisdom of the crusade. Last year, American workers were a lot safer on the job, for, according to the National Safety Council, 1950 industrial injuries declined in both frequency and severity. The accident frequency rate among employes of companies reporting to the council was 9.3 disabling injuries per million man-hours—a reduction of eight per cent from the previous year.

The year's safest industries: communications with an accident frequency of only 2.05; aircraft manufacturing with 4.17, electrical equipment with 4.28, and steel with 4.63. Thus the communications and aircraft manufacturing industries maintained their one-two safety positions of the previous year.

At the other end of the safety list was the lumbering industry, which was still the most hazardous of occupations, but nevertheless managed to cut its frequency rate two per cent to 46.85. Coal mining accidents increased five per cent last year, and the next two most hazardous industries were "mining other than coal" and clay products.

The accident severity rate for all industries reporting to the National Safety Council, based on the number of days lost per 1,000 man-hours, was .94 last year—a reduction of eight per cent from 1949.

« » « »

28 Million Are Now Covered by Group Insurance

The protection afforded American industrial workers by group life insurance is increasing more rapidly these days than ever before. The Institute of

Life Insurance reports that nearly 28,000,000 persons were covered by group insurance valued at \$51 billion at the beginning of this year. The number of insured persons compares with 23,000,000 the year before and 14,500,000 five years earlier. At the beginning of 1950 there were 66,000 "master policies" with business firms and other organizations compared with only 36,000 contracts five years ago.

Although by far the largest portion of group insurance provided security for employe groups, about \$3 billion of the \$51 billion total is included under the heading of group creditor's life insurance, covering the unpaid balance of loans to 8,600,000 people. This form of group coverage has almost trebled in the last half decade.

« » « »

Government

Dollar vs.

Consumer Dollar

Inflation, as most taxpayers know, plays a doubly iniquitous role when it comes to government expenditures. As government costs go up, so do taxes, higher taxes mean still higher costs, etc. In recent years the vicious circle has been everything the name implies. Now the Department of Commerce has undertaken to determine more precisely the impact of inflation on government costs and its findings are illuminating. Although consumers in general are spending 54-cent dollars these days, state and local governments are spending 50-cent dollars and the federal government, worst of all, is spending 48-cent dollars!

In no area of the economy, save in the field of new construction, has the depreciation of the dollar's buying power been more pronounced than in the field of fed-

(Continued on page 39)



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- 3** Replacement parts for your Iron Fireman equipment are immediately available when needed.
- 4** Iron Fireman's sound financial stability is your assurance that you will not be left with an orphan product — without replacement parts or service.

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IRON FIREMAN MFG. CO.

1101 W. Adams St.

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AUTOMATIC OIL-COAL-GAS FIRING



The Battle For Titanium

By Daniel F. Nicholson

Discovery Of Its Remarkable Qualities As A Structural Metal Has
Started A Vast Search For Better Ways To Process Tricky Titanium

A FIERCE struggle is in full sway between a stubborn metal on one side and America's finest scientific and engineering brains, and many millions of American dollars, on the other.

The metal is titanium — most familiar as a pigment in white paint but newly discovered to have such remarkable qualities as a structural metal that industry and science are making an unprecedented frontal attack to break down its resistance to processing.

Titanium is a light metal, 60 per cent heavier than aluminum but only 56 per cent as heavy as alloy steel, and it has tremendous strength. It is also tremendously resistant to most forms of corrosion — especially salt water corrosion.

Not the least of titanium's favorable points is the fact that it is the fourth most abundant of the metals suitable for structural use. It ranks behind aluminum, iron and magnesium. In nature, titanium is found as ilmenite, an ore containing iron and titanium oxide, and in rutile, an ore in the sands of ocean beaches. Ilmenite is con-

sidered the primary source because there are rich deposits in the United States and Canada in which the titanium content runs high.

Titanium has many other good qualities, and, like every other metal, it has limitations. Its possibilities are considered so great that one investigator, John P. Magos, director of engineering for the Crane Company, declares: "In the long run titanium is opening up an entirely new industry — a totally new market, where present metals are not satisfactory."

Problem of Extraction

The catch is this: Titanium is so extremely reactive that it can't be extracted from its ores by ordinary methods. Even contamination from the air is enough to spoil the metal. This means that the cost of production is very high, and that's where the battle line is drawn. Industry is bending every effort and using every resource to find faster and more efficient methods that will bring the price down.

At the moment, production is being expanded, regardless of price, because of the demand from the military forces and the Atomic Energy Commission. The precise uses to which the metal is being put are not disclosed, but it is apparent

that titanium already has proved itself, at least for these vital purposes.

Probably no other metal has gotten off to such a fast start as has titanium. As late as 1946 it was little more than a laboratory curiosity. Late in that year the U. S. Bureau of Mines, which had obtained information on the Kroll refining process in 1943 from the Alien Property Custodian, announced that it had placed in operation the first pilot plant producing titanium. Dr. Wilhelm Kroll, who had developed the process some years before and later fled the Nazis, had joined the U. S. Bureau of Mines and participated in the further development that led to the production of workable quantities.

The Pigments Department of E. I. du Pont de Nemours in 1942 had begun research which paralleled to a considerable degree the research done by the Bureau of Mines, and in July, 1948, the company announced that the first commercial pilot plant, with a capacity of about 100 pounds of titanium sponge metal a day, was in operation. Du Pont offered the metal for sale, and promptly was swamped with orders. Two additional production units, larger in size and of improved design, were erected and

← Mining village, crushing plant and mills and titanium ore diggings developed in Adirondacks along Hudson River by National Lead Co. since 1941.

were kept on a 24 hours a day, 7 days a week schedule. In April, 1951, a semi-commercial plant with a nominal capacity of 500 tons a year was placed in operation by the company at Newport, Del.

Offered In 1948

A du Pont affiliate, Remington Arms Company, offered titanium metal for sale in the form of sheets and rods in September, 1948. Remington has teamed up with the Crucible Steel Company of America and the two are now joint owners of Rem-Cru Titanium Incorporated.

Several other joint ventures have been organized to take advantage of the facilities of steel firms for processing ingot titanium. National Lead Co., a leading producer of titanium pigments, is in partnership with Allegheny Ludlum Steel Corporation, the largest producer of stainless and high alloy steels, and they own the Titanium Metals Corporation of America. Allegheny Ludlum produced 1,000 pound ingots in October, 1950, for the first time, and now rolls them regularly. Another combination is P. R. Malory and Sharon Steel.

The basic process in extracting titanium from ore begins with a treatment with carbon and chlorine gas to form titanium tetrachloride. The next step is to react the tetrachloride with molten magnesium which combines with chlorine to form magnesium chloride and leave a titanium sponge. Because of the affinity of titanium for gases, the process must be carried out in a high vacuum or in the presence of an inert gas such as helium or argon.

While the sponge metal can be reduced to powder and thence to solid form by powder metallurgy techniques, this process requires costly equipment and is limited in the size of the product that can be turned out. The commercially desirable process is to melt the sponge



Titanium refining furnace built by duPont

into ingots, but here again the extreme reactivity of titanium is a formidable barrier. In its molten stage the metal must be kept away from air or it will pick up nitrogen and oxygen irreversibly, hence a vacuum or an argon or helium atmosphere is necessary. The molten metal also combines with almost every kind of melting container and picks up contamination from tungsten or carbon-tipped electrodes.

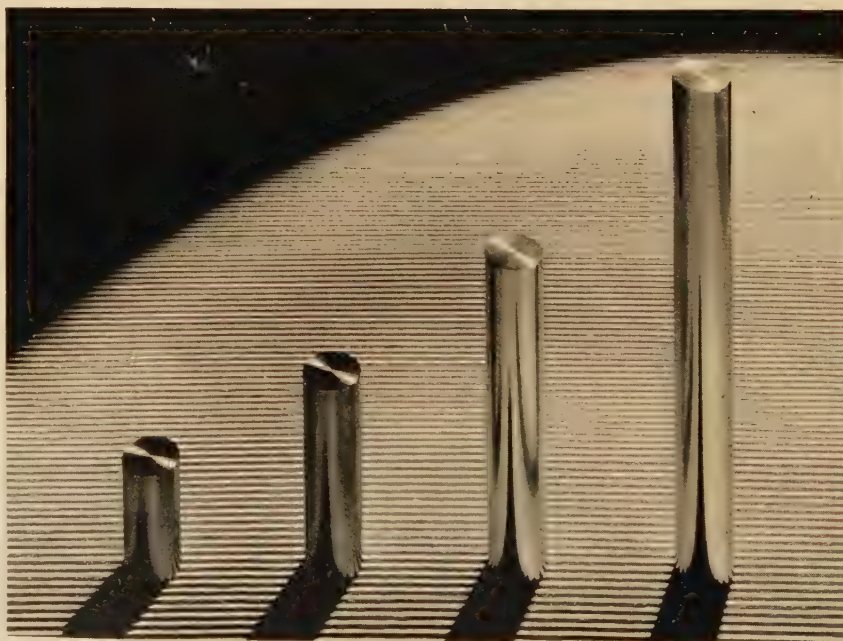
The problems of contamination from the container or from the electrodes of the heating furnace have been mastered in recent months, the Titanium Metals Corporation reports in its Handbook on

Titanium Metal. "For most of 1950," the Handbook states, "the small-batch method of producing titanium sponge and the hazardous practice of slowly building up a titanium ingot against a cold-copper mold surface invariably lead to variations in metal composition and quality from batch to batch. However, now that the titanium industry is entering a stage whereby large batches of sponge are continuously in production and may be intermixed and blended, and titanium ingots are consolidated from this sponge in such a size that very large pools of molten metal are available for solution of alloying elements, it is to be expected that soon these exasperating variations in metal performance from lot to lot will tend to wither away."

Ingot Readily Handled

Once the ingot has been produced, titanium is readily handled by mills accustomed to working high alloy steels. It can be forged, rolled, extruded, drawn, and so on. Titanium Metals Corporation sells a "commercially pure" metal in which the titanium content exceeds 99.5 percent. Other elements present are iron 0.10 per cent, nitrogen 0.02 per cent, tungsten 0.08 per cent, and a trace of oxygen. The company also produces four different titanium-base alloys.

One of the disappointments encountered by researchers of titanium was the discovery that while the metal has an extremely high melting point of 3150 degrees Fahrenheit, it loses strength and becomes brittle if subjected to a prolonged exposure at high temperatures. However, the high melting point and light weight combination still offers many interesting opportunities for service. There was also some concern for a while because pure titanium tends to



Crane Co. photo showing comparative density. Each bar weighs one pound. L. to R.: stainless steel, titanium, aluminum alloy and Dowmetal.

(Continued on page 4)

DEFENSE PROGRAM HEADING TOWARD THIRD PHASE: COMPLETE ALLOCATION CONTROL

Surprisingly, pressure for tighter materials control has come from industry itself

By JACK ROBINS

LAST month, as preliminary truce negotiations were getting under way in Korea, Washington announced plans for production levels for the third quarter of 1951—the first three-month period during which the Controlled Materials Plan is being used for allocating steel, copper and aluminum to manufacturers. For American industry, these developments, though occurring half way around the world from each other, were both highly significant.

What happens if peace breaks out along the 38th parallel? The gist of Washington's answer, in terms of production: nothing different than if hostilities continued. Meeting the aggression in Korea, Washington explains, was incidental to the larger job of national mobilization—Korea merely pointed up the urgency of the task. Since the first hints of truce, the news wires from Washington have carried administration warnings, from the President down, that we dare not relax. Within the ranks of the administration itself there will be no letup in pressure for the goals of defense preparedness which are calculated to be sufficient by 1953 to deter the Soviet Union from war.

Obviously, this is an over-simplified answer. There are at least two elements which promise to modify the defense program if peace comes. To what extent is anybody's guess.

One element is Congress. In the relief and unavoidable relaxation that would follow in the wake of

a genuine truce, it is altogether possible that Congress will be disposed to slow down here and there, while still giving lip service to our ultimate defense goal. Already, influential legislative voices have suggested that the 1953 goals be postponed a year—thereby easing the load on taxpayers.

The other factor is the mass of individual reactions to peace, if it comes. How many people who have put off buying a new car will decide they are justified in entering the market? What pressures will this build up among manufacturers? What political steam will it generate for relaxing credit and enlarging civilian demand? Literally millions of little, individual decisions will be made and collectively they will exert a tremendous influence on the course of production in a way that is impossible to measure in advance.

Washington Sees No Let-Down

If peace comes in Korea, will it hold elsewhere? What of Iran, Germany, Yugoslavia? A truce in Korea, even if genuine, does not automatically insure lasting peace throughout the world. As Defense Production Administrator Manly Fleischmann declared recently,

"I don't believe that a cease-fire order in Korea means, to the men in the Kremlin, an end to aggression and the beginnings of a lasting peace . . . We can end aggression only by being ready to meet it.

And we can have a lasting peace only by being ready to fight for it."

Fleischmann's views are reflected in the preparations which DPA is making for the future. By this year's fourth quarter it is likely that the "free area"—in which less essential industries may compete without direct regulation for leftover materials remaining after allocations have been made—will completely disappear. In other words, all industry will be completely under allocation with respect to aluminum, steel and copper. This will remove the outstanding difference between the existing CMP and that of World War II.

Third-Quarter Allocations

This means greater control of industrial production by Washington—apparently, and surprisingly enough, with the acquiescence, if not outright endorsement, of industry itself. The government's industrial controls have not encountered the opposition which has marked its price, rent and credit controls; the pressure in some instances for tighter materials control comes from industry advisory groups.

This is the forecast contained between the lines of the third quarter's allocations. In February, DPA Administrator Fleischmann estimated that the defense program would require about 5,000,000 tons of steel out of the 18,000,000 tons plus which the steel industry was turning out per quarter when the Korean war started. By June, with

(Continued on page 34)



Sparks fly as a Japanese electric welder fashions duraluminum into odd-looking...



Acme Photo

... bicycles that can be unbolted for compact storage. The lightweight bicycles product of a new postwar industry in Japan, are made in a wartime aircraft plant

Concluding a two-part article

REPORT TO INDUSTRY ON JAPAN

By Howard F. Van Zandt

Business dealings with the Japanese often lead to uproarious snafues. Here's how to avoid them.

MANY years ago, a Japanese businessman went to the United States for a long and exhaustive study of the fabrication of a type of high grade steel. His survey completed, he returned to Japan, constructed a steel mill in Kyushu, and then hired from neighboring mills the most capable and experienced Japanese steelworkers he could find. For several months he trained these experts in the particular way in which he wanted the steel made. When all was ready, the new mill swung into production.

But as the first batches of steel rolled forth and were examined, the Japanese mill owner grimaced. He had failed completely to produce the kind of steel he had seen in the United States. He rechecked his instructions with his foreman, and started over. Again, disappointing results.

When he stopped production a second time for a thorough investigation, he discovered the trouble.

His workmen had graciously listened to his orders, and then had proceeded to make steel the way they had made it all their lives. This frustrating practice is known by foreign engineers as "doing it more better," and only a radical maneuver saved the new plant. The owner fired all his workers and advertised for "men who know nothing about the steel business." With his green men trained from the ground up, the steel man started all over again and this time produced the finest steel in Japan — an accomplishment that in 15 years made him one of the island's wealthiest and most admired industrialists.

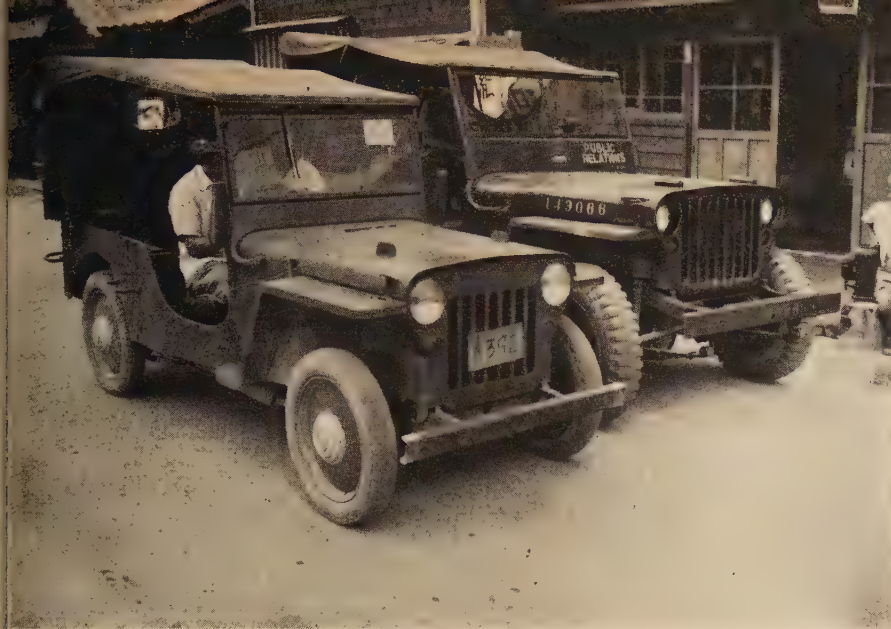
Figures Never Lie, Except . . .

Few Western businessmen would have understood Japanese psychology well enough to realize, as this Japanese businessman did, that his force of experienced men would not be salvaged after they had failed twice. But that is only one peculi-

arity of Japanese conduct that perplexes Westerners.

Americans considering a business undertaking in Japan invariably set about gathering pertinent statistics. During the past six years Occupation Force authorities have had the opportunity to check the accuracy of Japanese statistics. Their conclusion is that unless Japanese customs are understood, statistical data is hardly worth the paper it's written on.

An American pharmaceutical house representative was asked by his home office to estimate the number of babies born in Japan each month. His company was estimating the market for a drug required by babies. The American learned from Japanese Government sources that 258,000 children had been born in January, 1950, and 260,000 in January, 1951. He was about to pass on the information that approximately 259,000 children are born every month in Japan when he happened to mention the



A Japanese jeep stands beside its bigger forebear from the U. S. Copied from the American version, these jeeps are made by Matsuda Motors in Hiroshima.



Japanese clam fishermen use crude rakes to drag up catch from Yokohama harbor.

statistics to me. Knowing Japanese habits, I was able to tell him that the figures were "official," not actual. It is auspicious in Japan to be born in January, not so in December. Children born in the last week of December are shelved, so to speak, and simply not reported as born until January 1! Last December, for example, 74,000 fewer children were reported born as in the following January.

Translation Problems

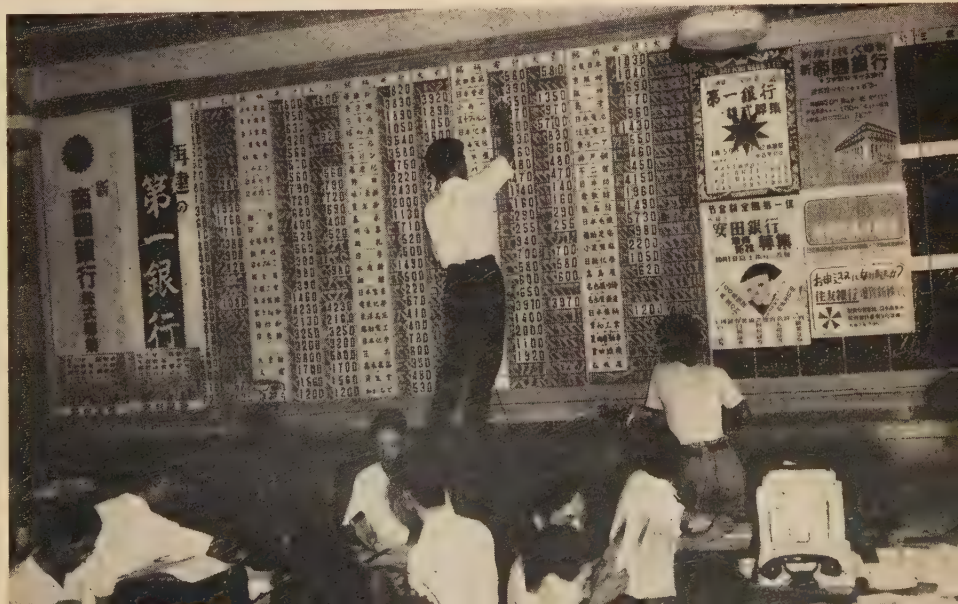
Americans desiring to do business in Japan usually correspond with Japanese companies, then follow up with personal conferences in the United States or in Japan. Here is one of the most fertile sources for confusion and snafu known to modern business! Americans assume that Japanese who read their letters or telegrams will understand them. This, however, is an assumption — no more!

One Japanese company recently received a letter from America inquiring: "Do you carry cloisonne vases?" The airmail answer was a masterpiece of precise information: "We ordinarily carry them, but if they are very large, they may be rolled if padded first or if a soft rug is laid on the floor." The mystified American merely wanted to buy the vases; he did not know that in communicating with Japan-

(Continued on page 23)



(Above) Production from this single remaining blast furnace at the Kawasaki Iron and Steel Works has been increased 33 per cent with American financed high grade coking coal. (Below) The Japanese stock market on a busy day.



Supreme Court for Scarce Materials

Businessmen who believe they have been

unfairly squeezed on restriction orders can appeal to a new "high court"

BUSINESSMEN who think they've been hit unfairly by a government materials restriction order and can't get the order-writers to agree are finding they don't have to give up there. They can take their pleas to a new and higher authority called the appeals board, a three-man tribunal directly under the chief of the agency responsible for orders restricting the use of scarce materials, the National Production Authority.

The board, in operation only since late April, listens to businessmen whose pleas have been turned down once by NPA's lower operating divisions that actually write the orders — like the construction division or the iron and steel division.

Appeal Requirements

Other prerequisites for getting the board to consider a case, other than an industry division turnaround, are these:

The application for an appeals board decision must be filed within 45 days after the unfavorable industry division decision has been rendered.

In coming before the board, the case must not contain any "new and substantial" facts that hadn't first been submitted to the industry division for its reconsideration of the case.

Finally, the case must be based on the claim that the order, if applied to the complaining company, would cause "unreasonable hardship," "improper discrimination," be against the "public interest" or "national defense."

It doesn't hurt, either, if the businessman comes equipped with some patience since it sometimes takes several weeks for the board to hand down its decision. Nonetheless, at least a few businessmen have found a plea to the board well worth their time and efforts.

Take, for example, a small stove

By MITCHELL GORDON

manufacturer in the mid-west. The order he didn't think fair was one limiting makers of stoves, refrigerators and other consumer "hard goods" in the amount of steel they could use in the three months beginning April 1. The 80 per cent limitation was based on the amount of steel a company had used to make the same products in the average of the first two quarters of 1950.

This particular stove maker complained that his production was unusually low in the first half of 1950, because during that time he was shutdown for retooling, suffered a work slowdown, then a one-month strike. The iron and steel division, which issued the order and was the first to hear his complaint, agreed he rated more steel, but not as much as he asked.

Unsatisfied, the stove maker went to the appeals board, which heard his case and decided the work slowdown should have been given more

consideration by the iron and steel division. Thus he was awarded additional steel.

Another complainant who wanted to build a drive-in theatre in Texas was hit suddenly by an order prohibiting their construction after October 26, 1950 unless "substantially" started. He claimed his start was "substantial," but NPA's construction division didn't agree.

Movie House Approved

He went to the appeals board armed with a half-dozen photographs and additional data to show how he'd cleared houses off his site, graded and filled in earth, dug drainage canals and installed pressure pumps and a boiler. The appeals board decided that work was indeed "substantial" and told him to finish his outdoor movie house. It attached one condition: he must sit down with an NPA construction division official and design out of the new structure as much critical material as possible.

A manufacturer of baby bath

(Continued on page 38)



Three-member N.P.A. Appeals board: Jack M. Rorimer, a businessman; Chairman T. Munford Boyd, a lawyer; and Frank J. Peterson, a former labor organizer.



Washington's unique National Inventors Council has inspired full and part-time "idea men" to come up with such inventions as the life-saving signal mirror.

Wanted:

INVENTIONS!

Uncle Sam's amazing GHQ for war-winning ideas is in full swing again

By BENJAMIN MELNITSKY

CRATED models of inventions overflowed from the stockroom into the aisles that ran between desks stacked high with letters describing still more inventions. It was shortly after Pearl Harbor; the place: the National Inventors Council in the Department of Commerce Building in Washington. Here, in the turmoil, was the receiving end of an avalanche of war-winning suggestions from professional inventors, basement-workshop gadgeteers, housewives, schoolboys — virtually anyone with an idea that might aid the armed services. In an average day, no less than 2,500 ideas poured in.

Inventors by the hundreds also came in person to the idea headquarters. The last of the day's visitors picked his way through to Di-

rector John C. Green's office, introduced himself as Sam Ruben and told how he had devised a cold-weather battery which, he thought, might have military applications. Informed that the idea could not be used, he asked, "Are there other problems I can tackle?"

Typical Problems Today

The answer was an emphatic "yes," there were problems galore. A rubber substitute for wire insulations, improved traction devices for military vehicles, means for signaling ground troop identification to friendly planes — these and hundreds of other inventions were desperately needed by the armed services. It was the job of this unique federal agency to facilitate



One man sent in what looked like a carpet sweeper; it became the famed mine detector.

their solution by appealing to the country's full and part-time inventors — an undertaking that proved phenomenally successful in World War II and today is operating once again at full speed.

The director pointed to a folder on his desk. "Here's one you might try. The Signal Corps is having a rough time with 'Walkie-talkie' batteries. Flashlight types are now being used, but they lose 90 per cent of their effectiveness during transit and conk out on the job after about 12 days. Any ideas?"

Ruben's idea — a mercury dry cell battery, half the size of the standard type yet with five times the service life — proved so successful that he was awarded one of 10 "Certificates of Appreciation"

granted to inventive Americans during World War II. The monetary savings alone were enough to support the National Inventors Council not just for the war but for years afterwards!

The inventors council, which sifted nearly a quarter of a million war-winning ideas, sprang from a spur-of-the-moment suggestion, by Lawrence Langner, the eminent authority on international patent law. At lunch one day in 1940 with Dr. Thomas Midgley, Jr., Langner popped up with an idea that ran something like this: "Scientists, researchers, and other technicians are being mobilized in the all-out defense effort. That's fine. But, how about our independent inventors?"

Langner's idea blossomed into reality with the organization of the National Inventors Council in August, 1940. By the end of the war, this mighty midget of government agencies (whose total six-year expenditure was only \$519,779—\$195,221 less than appropriated) had processed no less than 208,975 ideas. Of the hundreds of crucial military problems it tossed to a curious public, over 25 per cent were solved.

After the war the council settled back to a stand-by basis, but the current defense program has brought it to life again in a hurry. Ideas and inventive schemes are now pouring in at a rate of over 2,500 monthly.

All-Star Team

The council is the government's "All American" scientific team headed by Charles F. Kettering. Lawrence Langner is secretary and on the 16-man committee are Rear Admiral T. A. Solberg, Major Generals D. L. Putt, and W. H. Maris, research and development chiefs for the Navy, Air Force, and Army. Industry representatives include Dr. George Baekeland of Union Carbide and Carbon; Dr. Oliver Buckley, president of Bell Telephone Laboratories; Homer Ewing of du Pont; Dr. William D. Coolidge of General Electric; James C. Zeder of Chrysler; Dr. George W. Codrington of General Motors; and Luis de Florez of the engineering company that bears his name. Engineering schools are represented



Poster used to encourage war-winning ideas.

by Dean F. M. Feiker, Dr. Roger Adams, and Dr. Webster N. Jones. To round out this impressive roster are Watson Davis of Science Service; Dr. H. L. Dryden, director of the National Advisory Committee for Aeronautics; and Patent Commissioner J. A. Marzall.

Rock-Bottom Budget

The council's rock-bottom payroll covers only the salaries of a handful of secretarial and technical personnel. At no expense to taxpayers, members donate their time, energies, and, not infrequently, the facilities of their own company laboratories.

One big reason for the council's formation is the fact that most war inventions have come from civilians. Examples: the Colt revolver, the Garand rifle, the Whitehead torpedo, Vielle's smokeless powder, and Erickson's revolving turret warship.

Among the council's many successful invention finds is the Army mine detector which played a crucial role in the World War II African campaign. The idea came to the council from Charles Hedden. An inveterate sparetime inventor, Hedden had earlier designed a curious device resembling a carpet sweeper for a friend who spent his spare time searching for buried pirate gold.

During the war, the treasure hunter brought his strange gadget to the council, which quickly passed it on to the Army for consideration.

It was an instant and dramatic success. The best German and British mine detectors were harried to discover anything deeper than six inches below ground. Hedden's device could spot metal particles buried 30 inches. The council then circularized the file on the invention among numerous government bodies with the result that his mine detector was later put to use pinpointing bits of metal left in the bodies of combat casualties, locating metal parts or coins sent through the mails illegally, and detecting hidden weapons on criminals and potential saboteurs.

Ignores Red Tape

To get promising ideas rolling into production, the council rips away Washington red tape and ignores the sacrosanct "channels" through which the military customarily plods its slow course. It is not a matter of legislation or Presidential directives. The prestige of council membership often is enough to open doors normally sealed tight to the average inventor. A typical red-tape-cutter was the late Fred Zeber. Visiting the Army Engineers School at Fort Belvoir, Va., on council business one day, he was shocked at the slow and hazardous methods used in clearing mine fields. He hustled back to his Chrysler research laboratories in Detroit and put some of his best men on the job. Within a few weeks, he handed the Army its first satisfactory tank-driven mine detonator, a huge harrow-like structure made up of individually suspended steel disks. Another Army visit by Scientist Zeber resulted in a highly mobile self-propelled, anti-tank gun which did yeoman service during and after World War II.

Working closely with various branches of the armed services, the council periodically compiles lists of technical problems which it makes available to the inventing public. Here are some typical problems that are now awaiting solution:

A new method for rapidly discharging large quantities of military supplies from commercial or military vessels either over the beach or at dockside.

A substitute for down and waterfowl feathers (now on the shortage

(Continued on page 38)

Does Russia Lead From Weakness?

An Industrialist Reports Europe's Views As

He Found Them And Calls For Political Leadership By American Businessmen

By **ERNEST T. WEIR**

Chairman, National Steel Corp.

IN Europe—as I found on a trip last fall—it is felt that if war comes it is much more likely to result from some action of the United States rather than Russia. They know that neither the American people nor its leadership want war, but they fear that we will blunder into some incident that will pull the trigger. This explains much of the European attitude toward our present situation in Korea. They believe that Russia definitely does not want war. This is not because they attribute any sweetness and light to the viewpoint of Russia's rulers. It is based on analysis of the underlying practical factors of Russia's situation.

Here is the basis for their reasoning: When we of the West look at Russia we think in terms of her strength. That is because we always hear of the number of divisions she has, her tanks, artillery and airpower, her great land mass, and her position in Central Europe and Asia. Against this we compare our relative military unpreparedness. If we can imagine ourselves behind the Iron Curtain, however, and look from East to West we get a different picture—and one that Russia sees more clearly than we do. She knows that military power today is primarily a manufactured product—a product of industry, if you will. Stalin, himself, admitted that in the last war.

Russia knows that the total resources and industry under her control are vastly inferior to those of the West and that the great repository of industrial strength is in the United States—beyond reach of Russian land power. Her production of steel, coal and oil, for instance, is only a fraction of that of the West. She knows how quickly the West can convert in-

dustrial power into military power through a technology and trained manpower with which she cannot hope to compete. In addition, she has serious internal difficulties. We know of them only in general outline, but we know they are there.

What If Russia Moved On Europe?

Against this background, assume that Russia started a war, and succeeded quickly in occupying most of the Continent of Europe. What then? She could expect instant retaliation from us—particularly in the air. She would have to cope with resistance movements in every country from the Atlantic back to and including her homeland with an army spread thin over a vast area. And on this shaky foundation, she would have to undertake history's greatest military operation—the crossing of two vast oceans to overcome and occupy the United States. This would be necessary because if this war ever starts, it will be the final showdown—and so long as the United States remains a military power, Russia can never draw a safe breath. In Russian eyes, do you think this looks like an easy task, or one that assures success? And how do you suppose Russia's rulers appraise the consequences of failure?

There are two other factors of a different nature. The first is that Russia has never won an offensive war. The second is the

central belief of Communist doctrine that Communism eventually will prevail throughout the world because Capitalism will fall of its own weight. Under this belief, military force is not a necessary instrument for attainment of Russia's aims and Russia, therefore, can afford to wait.

For these reasons, Europeans believe that Russia is actually on the defensive. They believe her position is dictated by weakness, not strength, and by fear, not confidence. Admittedly, this creates a perilous situation. A leadership which is characteristically distrustful and is motivated by fear and weakness is unpredictable and likely to lash out first if it thinks it is in danger. Even so, Europeans believe that Russia is much more disposed than we suspect to arrive at some basis for world peace. It may not be all the West would want but it at least would be a starting point out of the tension and release from the burden of military preparation that now weighs down the world.

Peace Choice

Would not a peace even of this kind be preferable to a war which would destroy western civilization and plunge the world into an era more terrible than the Dark Ages? Obviously, we must continue to build and maintain our defenses so long as there is any possible danger of war, but also we should take world initiative in exploring every possible avenue toward peace.

I am convinced that if we can avoid war, if we can establish peace—we will enter the greatest period of economic and social progress in all history. The world over, there are signs that peoples have awakened to the potentials for human betterment that started with the

SPEECH OF THE MONTH

Made before the National Assn. of Purchasing Agents, June 5, 1951.

Industrial Revolution. With modern transit and communication, there are no remote areas anymore. The day of colonialism is about past. From Asia, for instance, we hear repeatedly of the stirring among the peoples of all countries there, of rising nationalism, of the discontent with their present lot, and of the demand for better conditions of life. India has been a forerunner in this development and, according to reports, is an accurate indicator of the new attitude throughout the Orient.

Pain and unrest may go with the birth of this new spirit for awhile but the movement will be forward. The peoples of those countries will become better producers and better consumers, and with their teeming populations, even a slight improvement in their economic status would make an enormous contribution to the betterment of world conditions. And in this, the United States would have much both to give and to gain.

Our Grave Responsibility

In view of this two-sided picture of the world's future—one dark and one light; one war and desolation, and one peace and human betterment—the United States, as the world's leading nation, bears a grave responsibility. It should be the world's great champion for peace—and it should be made known as such to all the peoples of the world. And in saying this, we again come back to the proposition that this cannot happen unless we have political leadership that is capable of thinking and acting in terms of this magnitude.

As it is we hear too little from our leadership that is positive and constructive. We are told that we must prepare to endure 5–10–20 years of tension . . . of expanding government and government costs . . . of widening government controls . . . of high taxes . . . of military service for our youth . . . of a garrison state economy. Think what this will mean. It will mean that by the end of 20 years—if it does end then—we will have two whole generations of Americans who have never had the opportunity to know the real America. They will have no experience with

the real individual independence that made this country great but on the contrary they will accept as an accustomed thing, the detailed control over their private lives by a powerful central government.

It is our solemn obligation to see that the America that was given to us is preserved for those who will come after us. The only way it can be lost is through bad political action. By the same token, the only way it can be preserved is through good political action.

Political Leadership

The only way that this country can cope with the world situation as it is today is with political leadership that is equal to that situation. The only way we will get political leadership of that standard is through alert and determined political action by the people of this country. Businessmen have a particular responsibility to help bring this about. The capacity for leadership they have demonstrated in building and producing imposes on them the obligation to take the lead in preserving the fundamental conditions that have made it possible to build and produce in the way they have.

In Russia and some other countries industrial management can do a pretty fair technical job. But that is all it can do and it must function strictly within the limits laid down by political leadership. The American businessman does not have to operate under such limits—not yet. On the contrary, he can help establish the limits of political leadership. If he fails to exercise this American birthright, is he not placing on himself voluntarily the limitations which his European counterpart must accept under compulsion? Isn't he inviting the extension of government power?

There are a number of things that every businessman can do.

He can vote.

He can persuade his family and friends to vote.

He can find out who is really electing his community officials and his congressmen—the better elements or the gamblers, racketeers, and professional politicians. If he finds that it is the latter, he can join an organization formed to change the condition and if none

exists he can take the lead in forming one.

He can keep abreast of important national issues . . . make up his own mind on them . . . be outspoken . . . and help form the public opinion that usually determines what is done about them.

He can follow the actions of his representatives and senators . . . let them know when he disapproves of what they are doing and—just as important—let them know once in awhile when he approves their actions.

He can refrain from seeking for his own business aid from government which increases both the cost and the power of government.

He can influence his community organizations which support the idea of governmental economy in general to support it in particular when it comes to federal spending in that community.

Any businessman who will do these things will be at least ten times as active as the present average. If the general run of businessmen did them, they would become a potent and a constructive influence. I want to say that I am not asking you to do anything that I do not do myself. I have taken a long and very active interest in political matters and make no bones about it. I intend to keep on doing so. I have never thought that my position in the business world cancelled either my rights or my obligations as an American citizen.

Our Hope for Peace

So long as his motives are right, the public not only accepts but welcomes the business leader in the political field. The closer he is to the people and the better they know him the more true this is.

I know you have heard other people on other occasions who have urged businessmen to take a greater interest in political activity. Probably you have paid very little attention to them. I sincerely hope that that will not be the case on this occasion—because in these most serious days—above all others in our history—there is so much at stake. We can only have good government through good politics. And only through good government can we hope for peace in the world.

Report On Japan

(Continued from page 17)

These firms simple, clear English is essential.

Japanese companies pay high rates for translating service — an expense that would be unnecessary if their correspondents abroad would use readily understood English. A Japanese businessman once told me that he had received the following message in English: "If your company will be so kind as to forward two complimentary specimens of your esteemed merchandise, we would appreciate this courtesy." It cost him more to get the message translated into simple Japanese meaning "Send two free samples," than the samples themselves cost!

Each month tens of thousands of meetings are held between Occidental and Japanese business men. Usually the Japanese profess to speak English, or an interpreter is present. At the end of the meeting Japanese and Westerner confidently assume that they heard and understood all that the other said, and were themselves understood. While in Japan I asked 20 of the best interpreters I knew to estimate the percentage of Japanese-American conversations they felt they succeeded in getting across accurately. The highest estimate was 80 per cent. The lowest 30!

The Language Barrier

Clearly, the language handicap is the principal barrier to understanding and to successful business relations between Japanese and Americans. Only one out of 5,000 Americans of Caucasian ancestry serving with the Occupation Forces was regarded as competent in both spoken and written Japanese. Only one out of about 2,000 Caucasian-American businessmen living in Japan is considered competent in both written and spoken Japanese. It is only because many Japanese study English, and a considerable number of Nisei (Americans of Japanese ancestry) are available as interpreters that business can be conducted at all. Unfortunately, most Japanese who study English learn only the rudiments of it.

To check this, I asked my associates in an American office in Tokyo to name the Japanese with

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whom they did business regularly and whom they considered to have a complete understanding of English. All named the same man. I then asked this Japanese gentleman to say honestly and frankly how much he understood of what was said to him in English. His answer: "Maybe half!"

Nisei Widely Used

There is growing realization among American companies in Japan of the importance of requiring English-speaking personnel to learn the language of the country. Unfortunately, even if he is linguistically inclined, it takes the average business man three nights of study per week for about three years to learn to use 6,000 words capably. It takes another three, or possibly four years of hard work to learn the exceedingly difficult 1,850 Chinese-Japanese characters deemed essential to pass a literacy test.

Increasing use by U. S. concerns has been made in the past three years of Nisei in staffing Japanese offices. Before World War II Nisei were disfavored in Japan, because

many of their parents were of humble birth. Since family rank is of tremendous importance in Japan, the Nisei inherited the handicaps of their parents' social position. The Nisei have played an important role in the Occupation, and as a result have been given a new position in Japanese thinking.

American companies, particularly those in cities where the Nisei population is large, notably Chicago, Denver, and the Pacific Coast cities, recruit Nisei locally, and after full training in the home office send them to Japan. Nisei are valuable in Japan only if they speak a high grade of Japanese, and are themselves of good educational background. Although Japanese will tolerate mistakes in Japanese from Americans of Caucasian background, they are highly critical of mistakes made by persons of their own race. About one Nisei in a hundred will have the necessary qualifications. Most of the others either do not speak Japanese, or speak it with a type of patois which is distasteful to native Japanese.

Nisei and other Americans who are sent to Japan must be paid far higher salaries than are Japanese employees. Americans demand homes that are heated in cold weather. Japanese don't, except in the far north. Americans sleep on beds. Japanese are content with a pallet laid on the floor. The Japanese diet is relatively inexpensive — a family of five can be fed for the equivalent of \$25 per month. Americans living in Japan have to import much of their food and, as a result, the monthly grocery bill is higher than in the United States.

Living Costs In Japan

American children must attend private schools at a tuition of about \$600 per year per child. Japanese go to public schools — often unheated and windowless. Americans habitually have personal automobiles, although there is a 40 per cent duty on cars imported into Japan and gasoline costs twice what it does in the U. S. Roads are bad, and automobile repairs cost three or four times the American rate. Japanese rarely own automobiles privately.

The comparison could continue. Most American companies with offices in Japan pay their employees an overseas differential ranging from 10 to 50 per cent, to compensate for the extra expense incurred by life in Japan. In addition, American companies usually rent or buy Japanese homes for their employees from the States. They are supplied rent free, or at a nominal rate, and the company pays public utilities charges. The Occupation Forces have sequestered nearly all the desirable foreign style homes in Japan, and, until the occupation is over, suitable homes will continue scarce.

Medical and dental care are not offered foreign commercial personnel at U. S. Army hospitals in Japan, nor are Nippon institutions suitable for American patients. In January of this year I visited a Japanese friend in one of Tokyo's best hospitals. Although the temperature outside was below freezing, nearly every door and window in the hospital was wide open. There was no heat of any kind. Some U. S. companies now operating in Japan bring their employees and their families back to the

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United States at company expense for a vacation and furlough each year. The time is often spent in doctors' and dentists' offices. Prior to World War II it was common to give a furlough once in three years. It varied from two to six months in length, was at full pay. Furloughs are more frequent, and therefore shorter since the war, due to the availability of fast air transport across the Pacific. Whereas before the War it took 15 days to cross the Pacific by water, it can now be done in 25 hours by air.

Office expenses in Japan are not high. Most foreign companies employ Japanese to perform all tasks except those of a top executive nature. Usually three Japanese are employed where one would be required in this country. The pay of Japanese will run from \$18 per month for an office boy up to \$300 per month for a top ranking manager, although very few make the top pay level. The Occupation Forces have engaged most of the Japanese office help who were trained in English before World War II. Except for an office manager, an interpreter, and a secretary, most employees will speak very little English.

Tokyo Building Boom

All large Japanese cities are now occupied by Allied troops, which have taken over the best office buildings. Most of the others were destroyed in the bombings and have not yet been rebuilt. In Tokyo and Osaka, however, a building boom is under way, and within 12 months there should be no problem in obtaining good office space at reasonable rents. There are over 100 modern office buildings, six stories or more in height, now under construction in Tokyo. Kobe and Yokohama, favorite places of residence and business for foreigners before World War II, are not attractive for American business personnel under existing conditions. Foreign style hotels, office buildings, and homes have been taken over for military purposes, and very little is left for foreign businessmen.

Recreational facilities for Occidental business people are very limited. This is a handicap, for entertaining is essential to success in dealing with Japanese business associates. In normal times much

business is done over a cup of *sake*, or between sips of green tea. The Occupation Forces have taken over the best clubs, motion picture theaters, golf courses, and resort hotels. Commercial personnel may not dine at most Allied Force clubs, and hotels, even as guests of Army officers. It is anyone's guess how long Allied troops will be quartered in Japan. But few American businessmen complain about the pres-

ence of Anglo-American soldiers and sailors, for if they weren't there, Chinese Reds and Soviet troops probably would be.

Despite the discomforts of life for American commercial personnel, the opportunities to participate in the economic revival of Japan are great enough to attract many people from the United States. As Japanese trade rises, the opportunities increase proportionately. Imports



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and exports totalled \$697,000,000 in 1947, \$941,000,000 in 1948, \$1,415,000,000 in 1949; and \$1,780,000,000 in 1950. It is estimated that in 1951 imports and exports will approximate \$3,600,000,000, of which 53 per cent will be imports.

Imports Encouraged

Early in the Occupation era little could be imported by Japan except food and raw materials such as cotton, wheat, and petroleum. In 1951, for the first time in 13 years, interest is developing in improving Japanese industrial equipment. In May, 1951, out of recognition of the necessity of bringing in modern machinery, import duties were withdrawn until March 31, 1952, on 125 types of machinery; among them: mining, metals refining, machinery building, electronics, rolling stock, shipbuilding, chemical production, rubber, ceramics, textiles, paper-making, pulp milling, dairying, and railroad transportation. Licenses to import will be granted, however, only if the machinery will contribute to the self-support and

sound development of the Japanese economy, and to the improvement of the international balance of payments. Normally, only essential components are imported, not complete units. The Japanese are capable of manufacturing machinery of most kinds, and are principally in need of parts that they cannot build, and of machinery developed abroad since 1941. Prewar, the Japanese were technologically about 10 years behind Britain, Germany, and the United States. Now they are 15 years behind.

A dire shortage of capital makes it difficult for Japanese manufacturers or their banks to raise the funds needed to buy patents, machinery, and technological aid from abroad. Some foreign companies have provided the patents, machinery, and skills needed, and obtained in payment an interest in the recipient Japanese firm. The Japanese government will not authorize investment of foreign capital, however, unless it contributes to the improvement of Japan's international balance of payments, or

assists in its economic rehabilitation. These requirements prevent foreigners from investing in non-essential industries, and those which contribute only to native entertainment and luxury.

As pointed out earlier, the Japanese are disinclined to pay for advice. Since it would be folly to invest money in Japan or to license a Japanese firm to use complicated foreign machinery without supplying American "know how," fees for engineering and industrial management service must be included while concluding investment or machinery sales contracts. American banking firms investing in Japan, as well as manufacturers, must plan to send American experts to provide the advice and help the Japanese need. It must be remembered by those who knew Japan only as it was before 1941 that a large percentage of the Japanese who received training in the United States or in Europe, and who managed or owned Japan's great industries before World War II have been purged by Occupation Force fiat, and are not available to manage and direct the companies with whom they were associated before the surrender. The newcomers in Japanese industry are generally inexperienced, and with few exceptions have not travelled abroad.

Need Industrial Guidance

The Japanese are fully aware of their need for industrial guidance. As the Nippon Times put it editorially last year, "Japan must assemble technological aid from all advanced nations. She must catch up with her competitors or else she will never become truly self-supporting. The nation's backwardness in industrial technique, variously estimated at from 10 to 15 years, is reflected in its retarded economic development which in turn can be visualized from the fact that fully 99 per cent of the industrial plants employ 100 workers or less.

"These small enterprises lack capital so they cannot utilize the technological knowledge they desire so much. Moreover the scientific laboratories are still concerned too much with theorizing, and not enough with a practical approach, and they are constantly plagued with lack of operating funds . . .

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In short, it is recognized that the short cut to increased technical knowledge by the Japanese industries is the importation of 'know how' . . . The coming here of able technicians also has its limitations or there is a serious language barrier as well as purely Japanese ways of doing things which would tax the patience of many experts . . . Technical aid will not come from abroad if it is not assured that the rights to new technique and new products would be thoroughly protected . . . It would be too much to expect manufacturers abroad to send their technical knowledge to Japan without adequate assurances and safeguards, and such a project would require the careful supervision of a trusted and capable person or persons."

Technical "Watchdogs"

As implied in the Nippon Times editorial, unless carefully checked by a representative stationed in Japan there might be abuse of some technological aid contracts. An alert American representative in Japan would be able to watch production and sales, and make sure that the terms of license agreements were carried out fully and accurately. He would also inspect manufacturing processes and end products to be sure that high standards were maintained, knowing that failure to do this would in time discredit the American firm as inferior products were sold bearing the American tradename. The reputation of Japanese for business integrity is generally good. There have been a small number of conspicuous examples of trickery in past years, however, and mutual respect and honest cooperation in business can best be maintained in Japan as well as elsewhere in the world when responsible people are on hand to explain, audit, follow up, inspect and otherwise insure that no misunderstandings arise.

Some Japanese manufacturers in the period prior to World War II developed a reputation for producing shoddy merchandise. I discussed this with scores of Japanese manufacturers in nearly every part of the islands. Three explanations were offered:

1. Many American buyers, particularly those demanding cheap merchandise, used tactics which, though

legal, were scarcely ethical in forcing prices down to levels where the Japanese could not manufacture at the price agreed upon, unless they substituted inferior or cheaper components. To stay in business the Japanese substituted.

2. Many factories failed to institute effective inspection, and supervision itself was lax. Top management as well as engineering staffs permitted plants to operate with insufficient control and direction. Scientific management is unfamiliar in Japan. At a national convention on scientific management held in Tokyo in November, 1950, it was estimated that only five per cent of Japan's factories had attempted to institute scientific management; the remainder relied on intuition or rule of thumb.

3. Cost control methods being almost unknown in Japan, firms often bid low enough to get an order thinking that if a competitor could figure on making a profit at a certain price, the Japanese firm could do so at two per cent less! If it was later noted that the plant was operating at a loss, the quality

of the last work done would simply be reduced. Realizing that sound business can only exist if both buyer and seller cooperate, many foreign firms now go over probable costs in great detail with Japanese manufacturers, and at times recommend higher rather than lower prices. Reductions are more in order today than increases, however, for Japanese producers are raising their prices so fast that in many lines they are pricing themselves out of world markets. Cost control methods might be profitably introduced by American banking and industrial management concerns planning to invest money in Japan or work out technological aid agreements with her business firms.

The "Superstition Calendar"

Whether it be while teaching the Japanese a system of cost control, or while explaining to them the advantages of a new method of manufacture, Americans almost invariably are confounded by some inexplicable Japanese custom. Often Americans assume that strange behavior by Japanese is perverseness,



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or they become suspicious that the Japanese are up to some trick. The tiny handful of Americans who take the trouble to investigate find the action sensible and easy to appreciate — once the custom is understood.

As an example, according to a survey made by the education ministry three years ago, 73 per cent of the Japanese people admit that they follow what might be termed a "superstition calendar." This calendar plays an important part in Japanese business negotiations and is faithfully consulted before making business and other appointments.

In a 30-day month there are five

cycles or "weeks" of six days each. The first day of each cycle is called *Daian*. On that day all is auspicious. New companies are formed, weddings held, and contracts signed. The next day is *Shakko* — a good day only during the noon hour, hence a favorite for luncheon appointments. The third day, *Sensho*, is favorable in the morning, not in the afternoon. The fourth, *Tomobiki*, is favorable in the morning and in the afternoon, but unlucky during the noon hour. Business men don't invite their friends to lunch on that day. It is also a day in which no one is buried in Japan. Japanese believe that if anyone were to be interred on that day he

would draw his friends into the ground with him. The fifth, *Senpu*, is favorable in the afternoon, but not good at any other time. The last, *Butsumetsu*, is inopportune for engagements and contracts throughout the day. There are no weddings in Japan on *Butsumetsu* — except when some ill-informed foreigner is so foolish as to violate the taboo.

I discussed the need for learning Japanese customs with a European businessman new to Tokyo. The European said: "They'll have to do business my way or not at all." A year later he returned to Europe a failure. The Japanese have a proverb to guide them when they go to strange countries: "*Go ni itte wa go ni shitagae*." "Obey the customs of the place where you are." So have we: "In Rome do as the Romans do." A clearer understanding of the wisdom of this ancient maxim will go a long way in improving Japanese-American business relations.

Here, There and Everywhere

(Continued from page 8)

industry's estimated 36,000,000-ton scrap deficiency this year. The recovery drive is directed by a scrap mobilization committee of auto wreckers, established by the National Production Authority.

• **Atomic Attack Defense**—A 32-page booklet on industry plant security, entitled "How To Prepare Your Plant For Atomic Attack," is being made available to business concerns without charge by Walter Kidde and Company, 675 Main street, Belleville 9, N. J. The booklet explains how to organize personnel to cope with possible plant disasters, and gives recommendations for strengthening plant construction and sustaining production in the face of bomb attack.

• **Can Policemen Strike?**—Should city policemen be allowed to belong to a union which can strike or threaten to strike for higher pay? Asking this question in a nationwide public opinion survey The Psychological Corporation found that 60 per cent of the respondents answered "No," 23 per cent answered "Yes," and 17 per cent were uncertain.

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Invest in the MIDDLE WEST

Reviews of Middle-western Companies

By DANIEL F. NICHOLSON

THE essence of the modern high standard of living is the mass production of goods by machines. Machines turn out goods faster, better, and infinitely cheaper than they can be made by hand.

The ultimate in mass production machines is the metal forming press, whether it be a small device stamping out hundreds and thousands of items each day, or a hydraulic monster exerting thousands of tons of pressure to form truck frames, freight car ends, steel pipe, or what not, from thick sheets of steel with one tremendous stroke.

A relatively small company designs and produces some of the largest presses used by other companies to mass-produce goods. The company is the Clearing Machine Corporation, located in Chicago and now doing a world-wide business. The company has the additional distinction of having been organized in 1933, in the depth of the depression.

Tailor-Made Product

Although the Clearing Machine Corporation's balance sheet for 1933 was unimpressive, with total assets of \$158,000, cash \$1,500, and capital and surplus of \$120,000, the company did not start out making small presses and work its way up to the big ones. On the contrary, Clearing started out making big presses, and only recently has added smaller presses to its line.

Big presses are almost exclusively made to the precise needs of the buyer. The larger the press, and the more specialized, the more restricted the market for it. Clearing Machine Corporation, having established an international reputation, saw an opportunity to capitalize on its name by expanding into the field of smaller presses. "We would sell a big press for a

hundred thousand dollars, and some one else would sell the same buyer five small presses at \$20,000 apiece," R. W. Glasner, president and founder of the company, explained.

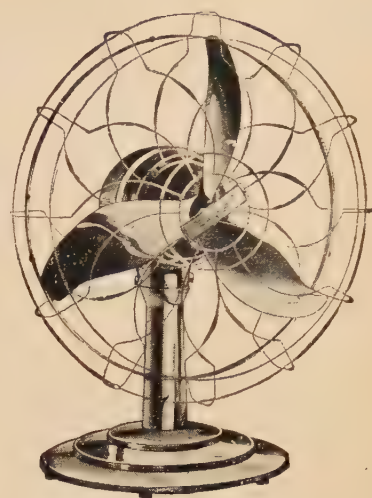
There are operating advantages in manufacturing smaller presses. Because of the larger market for them and a larger degree of standardization, they can be mass produced, and when demand is slack they can be manufactured for stock, thereby avoiding plant shut downs.

Plant Expansion

A small press, to Clearing, is one with about 25 tons capacity and a sales price of about \$2,000; a big one will have a capacity measured in thousands of tons and will sell for several hundred thousands of dollars. In 1949 the company introduced a line of open-back, inclinable presses "to expand our market to include users of machines considerably smaller than heretofore manufactured by Clearing." The company's annual report for 1950 informed stockholders that these new presses and other new products introduced in 1949 are being well received. More tangible evidence is the fact that the company is now building a new plant in Joliet, Ill., to be devoted to the manufacture of the smaller parts for its big presses and for smaller accessory equipment which can be more economically produced in a plant more suitably equipped for smaller work, and also for the complete manufacture of smaller presses.

Clearing has purchased 27 acres of land in Joliet, and the plant there will have an area of 32,000 square feet. The total expenditure for land, building and equipment will be about one million dollars. The plant is scheduled for completion early in 1952.

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in point of size is a hydraulic press of 16,000 tons capacity, built to finish form steel pipe for long distance oil and gas lines. This press forms pipe 36 inches in diameter from ½ inch plate in 40 foot lengths. Another gigantic press made by the company is a mechanical unit of 3,850 tons capacity.

One of the newer products of the company is a press of 2,000 tons capacity designed to forge automobile connecting rods from bar stock. In four strokes the press forges a unit containing two rods. The production rate is 450 pieces an hour. Forgings are produced with high precision by the press and require less finishing than forgings hammered into shape.

"Tornadyne" Clutch

Important auxiliary equipment for presses is also manufactured by the company, including press brakes and clutches, pneumatic and hydraulic cushions, automatic roll feeds, and coil cradles. Late in 1949 the company introduced a new "tornadyne" clutch and brake unit which, the company said, reduces the inertia effect of clutch parts by about 70 per cent as compared to conventional clutches, cuts about five per cent from power costs for operating a press, and effects large savings in servicing and maintenance.

Clearing Machine Corporation now owns its own plant in the Clearing Industrial District on the south side of Chicago, including emergency facilities built during World War II and now completely amortized. The newest addition to the plant is an engineering building that enabled the company to bring its entire engineering staff under one roof and enlarge it so that no outside engineering work will be necessary.

Earnings rose sharply after the end of World War II. In 1946 net earnings amounted to \$1,576,023 and in 1947 a record net of \$2,067,725 was reported. In 1948 earnings dropped to \$1,075,236 and in 1949 they dipped to \$413,872, but a rise in sales was already under way in the latter year and at December 31, 1949, the backlog of unfilled orders was more than double the figure a year earlier. Despite higher costs and higher income tax rates,

Clearing earned \$613,775 in 1950 and the backlog of unfilled orders at the end of the year was the largest in the company's history. Since that time a number of large orders have been received from the government in connection with the rearmament program.

Metal stampings have replaced many parts which were heretofore made from castings or forgings. The company has been able to demonstrate to its customers in many instances the efficiency of the stamping method. This to a great degree is responsible for the ever-widening acceptance by the industry of Clearing's products. More recently the company has developed a line of forging presses which hold good prospect for sales to the forging industry.

Sales figures are not reported publicly by the company, but statements filed with the Securities and Exchange Commission showed March quarter sales of \$3,364,000 as compared with \$1,831,000 for the first quarter of 1950.

A comparison of operating income, net income, and earnings per share of common stock, follows:

	Oper. Income	Net Income	*Earnings per share
1950	\$ 957,648	\$ 613,775	\$1.16
1949	583,747	413,872	0.78
1948	1,657,307	1,075,236	2.03
1947	3,260,039	2,067,725	3.90
1946	2,556,388	1,576,023	3.72
1945	759,530	253,421	1.20
1944	909,781	286,145	1.35
1943	1,189,914	432,451	2.04
1942	1,182,983	393,225	1.97
1941	554,127	331,859	1.66

*Based on following shares: 1947-1950, 530,000; 1946, 424,000; 1943-1945, 212,000; 1941-1942, 200,000. Adjusted to present shares outstanding, earnings for earlier years were: 1946, \$2.97; 1945, \$0.48; 1944, \$0.54; 1943, \$0.82; 1942, \$0.74; 1941, \$0.63.

Net profit before provision for federal income taxes was \$1,041,775 in 1950 and \$662,732 in 1949. The company reports that its excess profits tax credit under the present law is more than \$2,000,000.

A group of Chicago business men invested \$450,000 in the Clearing Machine Corporation from 1933 to 1938. On October 27, 1938, the company obtained about \$500,000 of additional capital through a public offering of common stock, and the proceeds were used to retire 4,500 shares of \$100 par value six per cent preferred stock. This was the only public financing done by

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he company. In 1943 a public offering of 19,000 shares was made for certain stockholders. On December 31, 1950, the company had 486 stockholders.

Present capitalization consists of 600,000 authorized shares of \$5 par value capital stock, of which 530,000 shares are outstanding. The company paid a stock dividend of 233 1/3 per cent in November, 1938, split its stock 2 for 1 on September 5, 1946, and on October 8, 1947, issued 1 1/4 shares of new \$5 par value stock for each old share of \$1 par value. The stock is traded in the over the counter market.

An initial cash dividend of 20 cents a share was paid in December, 1938, and payments have continued in each year since, as follows: 1939-40, 80 cents; 1941-1945, \$1; 1946, 75 cents before and 20 cents after the 2 for 1 split; 1947, \$1.90 on the \$5 par stock and 75 cents a share on the \$1 par stock; 1948, \$1.60; 1949, 80 cents, and 1950, 60 cents. Thus far in 1951 the company has paid or declared three quarterly dividends of 15 cents each.

A bank term loan of \$647,250 outstanding at the end of 1950 has been retired and the company has made a new bank loan of \$2,500,000, of which \$1,400,000 has been drawn down.

Assets Reviewed

Total assets amounted to \$8,313,375 as of December 31, 1950. Fixed assets consisted of land \$278,264, building \$1,140,416, and machinery and equipment \$2,432,230, or a total of \$3,850,910, before deducting depreciation reserves of \$1,635,588.

Current assets at the end of 1950 totaled \$6,096,032, including cash \$985,631, accounts receivable \$2,447,889, and inventories \$2,418,843, while current liabilities aggregated \$1,898,816, including \$129,500 due June 30, 1951, on the old bank loan.

The million dollars to be invested by Clearing Machine Corporation in its new plant at Joliet will represent an important expansion for a company whose net depreciated fixed assets total \$2,215,322, even though the comparison is distorted by the severe inflation of building costs. Several pages of the company's 1950 annual report were devoted to a demonstra-

tion of the extent to which metal forming presses are involved in the production of countless items of every day use. This demonstration is significant to share holders of Clearing Machine Corporation, the

report stated, "because it demonstrates a wide and continuing market for the products that account for Clearing's earnings, a most satisfying assurance for the future of our company."

Supreme Court For Scarce Materials

(Continued from page 18)

soaps and other children's toiletries in a big eastern city was dismayed when NPA prohibited the production of newly-designed glass bottles after March 31. He had spent several thousand dollars designing a new glass bottle that resembled a candle and was to hold shampoo in the center of a cake-like cardboard container of other toiletries. He had even purchased moulds to turn out the bottle and had taken some orders for the whole package.

When he went to NPA's containers division to complain that the order would work an "unreasonable hardship" on him, he was turned down. The containers people told him he could not make his novel

bottles until the order was relaxed.

The toiletry man took his story to the appeals board, which decided his expenditure on the new bottle was substantial enough to constitute an "unreasonable hardship" were he kept from realizing a return on it.

All of which might indicate that the board is sometimes more generous than its order-writing colleagues. Board members don't deny this, either. A spokesman puts it this way: "The industry division men are naturally interested mainly in seeing that materials get saved. Some divisions — like the construction division — get hundreds of pleas a week so they're bound to

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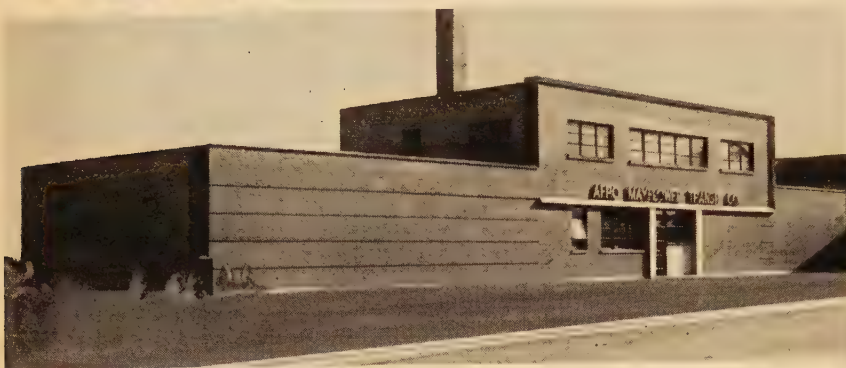
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reject borderline cases when they've neither the time nor the staff to go after additional details that might swing the case."

This doesn't mean, however, that the board has been giving every complainant more material. It hasn't even gotten around to considering many of the cases put to it — despite the fact that relatively few businessmen know of its existence. Of the 110 cases it received in its first two months of existence, 58 have yet to be taken up. Only 52 have been "disposed of" — and only 27 of these by decision. The other 25 were withdrawn voluntarily. Of the 27 cases that have been decided, 20 have been turned down. Seven have been granted.

But here's one hint to businessmen planning an appearance before the board: few of the 20 rejected pleas contained any element of uniqueness. The firm involved, in other words, couldn't show how the order hurt it any more than other firms in the business. Nor could it prove that the public interest or national defense would have been promoted by making an exception.

Unsuccessful Appellant

A water meter maker objected to an NPA order limiting the use of copper in consumer "hard goods" — including, of course, water meters. He claimed that water meters were essential and should get all the copper they need. Water meters, he added, get people to conserve a precious commodity.

"Maybe so," the appeals board replied in effect, "but you'd better get the copper division to amend its entire order. You haven't convinced us you're hurt by it any more than any other water meter manufacturer nor that the public interest or the national defense would be served by making an exception of you alone."

Another businessman who got little sympathy from the board for much the same reason was a property owner who before World War II built a grocery store since outdone in size and parking facilities by nearby supermarkets. This property owner wanted permission to enlarge his store and parking space so his tenant would take in more money and be able to pay him

(Continued on page 44)



INDUSTRIAL DEVELOPMENTS

IN THE CHICAGO AREA

INVESTMENTS in industrial development in the Chicago Industrial Area during July totaled \$13,826,000 compared with \$7,555,000 in June. Total investments for the first seven months of 1951 amounted to \$233,346,000 compared with \$85,630,000 for the same period in 1950. These developments included expenditures for the construction of new plants, additions to existing industrial buildings, and the acquisition of land or buildings for industrial purposes.

Fairchild Engine and Airplane Corporation of Hagerstown, Md., has started to rehabilitate the aircraft plant at O'Hare Field to be used for the construction of C-119 (Packet) troop and freight carrier aircraft. Since the end of World War II the plant has been used as a storage depot by various government units and an Air Force training base. During World War II the plant was used by Douglas Aircraft Corporation for the production of C-54 aircraft.

Universal Oil Products Company, 310 S. Michigan avenue, will construct a large research unit on a 58-acre site adjacent to Des Plaines.

Bell and Howell Company is constructing an addition which will permit the consolidation in Lincolnwood of the company's operations which have been carried on in older plants in Chicago. The addition will provide 100,000 square feet of floor area. Ragnar Benson, general contractor.

Clearing Machine Corporation, 6499 W. 65th street, producer of heavy metal working presses, is constructing a new branch unit in Joliet for the production of special machine tools for the defense program. Presses for the production of cartridge cases, projectiles, air-

craft parts, and other military supplies will be made in the plant which will have an initial floor area of 32,000 square feet and will be located on a 27-acre site.

Ceco Steel Products Corporation, 5601 W. 26th street, is adding 43,000 square feet of working space to its plant. The company produces steel construction components.

Vulcan Detinning Company of Sewaren, N. J., has acquired a 71-acre site along Cline avenue adjacent to the Indiana Harbor Belt Railroad in Gary. The company plans to construct a reclaiming unit as soon as possible.

C & A Terminal Company has constructed a one-story warehouse containing 100,000 square feet of floor space at 3636 S. California avenue. Klefstad Engineering Company, general contractor.

American Steel Foundries, 400 N. Michigan avenue, with Chicago Area plants in Hammond and East Chicago, has constructed an addition to its Hammond plant.

Siebens Brewery Company, 1470 Larrabee avenue, is constructing an addition to its brewery. Herman Gaul and Son, architect; John Gebhardt and Son, general contractor.

General Bandages, Inc., 531 S. Plymouth Court, manufacturer of bandages, has purchased a two-acre site in Morton Grove. The company plans to build a one-story factory which will contain 12,000 square feet of floor space.

Corn Products Refining Company of Argo Station in Summit has begun construction of additions to its plant.

Stronghold Screw Products Company, 216 W. Hubbard street, has purchased a 150,000 square foot site adjacent to the Chicago, Milwau-

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kee, St. Paul and Pacific Railroad at Waveland Avenue and Kilbourn. The company will construct a plant on this site.

Miller Motor Company, formerly located at 4027 N. Kedzie avenue, has moved into its new factory in the North Avenue section of the Clearing Industrial District in Melrose Park. The company makes hydraulic and air control cylinders for machine tools.

Harig Manufacturing Corporation, 319 N. Albany avenue, is constructing a 30,000 square foot building in Skokie into which it will move its operations. The firm makes dies, jigs, and fixtures as well as special machinery.

Interstate Steel Company, 308 W. Washington street, is constructing a steel warehouse building at Greenwood boulevard and Hartrey avenue in Evanston. The warehouse will contain 27,000 square feet of floor area. The new building will house both warehouse and office operations of the company and is the first building the company has owned in the area. Barancik Conte and Associates, architects.

Wyzenbeck and Staff, Inc., 834 W. Hubbard street, mechanical en-

gineers and producer of flexible shaft equipment, has purchased a one and part two-story building at 223 N. California avenue. The building contains 18,000 square feet of floor area and was formerly owned by McIntosh Electrical Corporation. William Kaplan, real estate broker.

West End Paper Stock Company has purchased 62,000 square feet of land at 5600 W. Armitage avenue, Bennett and Kahnweiler and J. J. Harrington and Company, brokers.

Burgess-Manning Company, Libertyville, manufacturer of radios and radio parts, has acquired a building at 5970 Northwest highway.

London Chemical Company, 607 S. Dearborn street, manufacturer of liquid chemicals, has acquired an 18,500 square foot two-story and basement building at 325 W. 32d street.

Baxter Laboratories, 6301 Lincoln avenue, Morton Grove, will construct a substantial addition to its production unit. The company produces intravenous solutions and blood transfusion equipment. Friedman Alschuler and Sincere, architects; Freevol Smedberg and Company, contractors.

Defense Program Heading Toward Third Phase

(Continued from page 15)

steel output up to some 20,500,000 tons a quarter, DPA's operating agency, the National Production Authority, also headed by Fleischmann, estimated that of a 20,800,000-ton third quarter production direct military requirements would take 1,760,000 tons, defense-supporting industry 15,660,000 tons, and that there would be 3,380,000 tons left for the "free area."

Late in June Fleischmann said: "About now, the United States is entering a phase of the mobilization program in which shortages of critical materials will be increasingly felt . . . Beginning with the third quarter of this year and continuing certainly through all of next year, the military take is going to peak up at a rate which should increase substantially each month."

When third-quarter steel allotments were finally announced on July 6—six days after the quarter

started—they reflected his forecast. The defense was taking a larger bite than predicted in June, although its consumption of steel was not being enlarged as greatly as many assumed from a quick reading of what Washington heavily-handedly called "third quarter program level determinations." Between June and July the steel figures had been juggled about, civilian items initially in the "free area" had been yanked under the CMP umbrella, and several hundred thousand tons of steel originally tagged for "free area" civilian construction were now under CMP allotment. A bit tardily, DPA interpreted the figures to show that steel for civilian production in the "free area" had actually been pared by only 362,000 tons—not by over a million tons as it first appeared.

Of the total estimated third-quarter production of 20,825,000 tons

of steel, defense-supporting industry allocations had climbed to 16,017-18 tons, from the June estimate of 15,660,000 tons. No announcement was made as to the direct military allotment—now considered secret with firm figures being used—nor did the 16,000,000 figure include steel needed for the atomic energy program or the foreign military assistance program. As interpreted by DPA, steel for purposes originally in the "free area" had been pared only from 2,580,000 tons to 2,218,000 tons.

Up to the start of CMP the government never had a satisfactory picture of copper and aluminum requirements and, hence, never made as definite a forecast on these two metals. Thus, a similar illustration of how the defense bite has grown here cannot be drawn. But the allotment announcement showed that out of third-quarter copper production amounting to 1,114,000,000 pounds, defense and other essential industries will get a shade less than one billion pounds; from an aluminum output of 598,000,000 pounds, defense and other essential needs will take 338,484,000 pounds.

Shift In Emphasis

The explanation for the growing consumption of critical metals by defense-supporting industries lies in the shift of emphasis that has taken place since fighting began in Korea. The government's initial policy was to give direct military production preference over everything else. But it soon became clear that military production goals would never be reached unless more attention were paid to defense-supporting industry. After the first schedules of fighting weapons were assured, preference was shifted to defense-supporting industry—a development that led to the adoption of CMP.

"Defense-supporting" industry is a complicated hodge-podge that includes railroads, power, petroleum, mining, and a host of other elements which must be maintained and, in some cases, expanded if military goals are to be met. The definition of "defense-supporting" industry broadened as NPA compiled its list of "B" products—those that were to enjoy firm

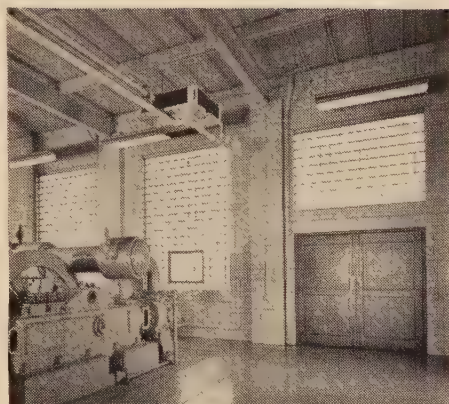
metals allocations to assure meeting production schedules.

It is so broad that defense policy now is entering into a third phase: that of government responsibility for complete allocation involving military, defense, and civilian production. Fleischmann foresaw this. About two months ago he asked a prominent business advisory group what it thought about extending production control. NPA, he said, was not anxious to make control complete, but he outlined the situation into which industry was head-

ing. "None of us in responsibility like controls," he said, "but they are a means to an end, and the end is production."

The reaction of industry, as NPA appraises it, has been as follows: the "free area" manufacturer is now, during the third quarter, operating under restrictions of a quantitative nature. He can use only 70 per cent as much steel as he did in the first half of 1950; only 60 per cent of his base period copper, and only 50 per cent as much aluminum—speaking general-

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Delta Air Lines, which originated the "Vacation Incentive Plan", reports that one division of a mail order chain increased sales 50 per cent over quota during a vacation contest, a refrigerator producer boosted sales despite an industry slump, and a truck line cut damage losses so much its insurance premium was reduced. Other vacation contest sponsors include furniture and insurance firms, dairies, laundries, ad agencies, retail stores and theater chains.

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ly and ignoring the exceptions in each case. He has no priority assuring him that he will get what metals and other materials he can use.

Under an all-embrasive CMP, during the fourth quarter, the erstwhile "free area" manufacturer will still be under a restriction based on the amount of his allotment, but he would at least have a priority. In a nutshell, says NPA, the average businessman says, "If the government is going to cut back my production anyway, the least it can do is assure me of the materials I need to operate at the top of my permitted production rate."

But if everybody has a priority, what use are they? NPA's answer: then it becomes the government's job to balance supply and demand so there will be materials and components to match each priority-rated order.

In theory, this can be done. The DPA, or its executive operating body, the NPA, must, however, retain its power of directive—which would then become the real "priority"—to step in with orders in individual cases to make sure, for example, that steel needed for tanks is not used for relatively less essential civilian purposes.

The theory, however, must still stand the test of practice, and if it fails to work out, the policy brain will have to be put to work figuring some new refinement to meet the situation. Probably the theory will work. It was the answer to the World War II dilemma of balancing production at the highest rate the nation has ever attained and doing it while some ten million of the nation's best production workers were in the armed forces. It is a tested theory which is not likely to be upset, unless by some now unforeseen factor.

TRANSPORTATION and TRAFFIC



THE Eastern Railroads have submitted a proposal to revise present pick-up and delivery service rules in Official territory. On intra-territorial traffic the carriers contemplate cancelling the present minimum rate of 75 cents for free pick-up and delivery service and apply instead minimum rates based generally on the class rate applicable for a 300 mile movement. These rates would range from 98 cents to \$2.42 per 100 pounds. These higher minimum rates would alternate with present rates plus specific charges for pick-up and delivery service ranging from 10 cents to 35 cents per 100 pounds. The 35 cents charge would be applicable for pick-up or delivery at Chicago. On interterritorial traffic the Eastern railroads would discontinue free pick-up and delivery, and allowance payments in lieu thereof, and make this service available at plus charges approximately equal to the average cost of the service. The initial hearing on the proposal was held July 6 in New York City and a second hearing was held July 18 in Chicago.

Express Agency Asks One Cent Boost in Interim Increase: The Railway Express Agency has petitioned the Interstate Commerce Commission for authority to raise the present 20 cents per shipment interim increase on less than carload traffic to 21 cents, except on daily newspapers and milk, cream and related articles. The rate boost is to compensate for an escalator clause wage increase granted express company employees, effective July 1. The 20 cents per shipment increase was authorized on interstate traffic effective May 3, 1951, to afford the agency interim relief pending final determination by the commission of their full Ex Parte No. 177 petition for general ad-

vances in express rates and charges. While the Illinois Commerce Commission has not as yet authorized the 20 cents rate hike on traffic within Illinois, we have been advised that the express agency is applying the increase on local express rates within Chicago. This is permissible since such traffic is handled by truck and there is no rate regulation on truck transportation in the state of Illinois.

Canadian Railroads Granted 12 Per Cent Freight Rate Hike: The Board of Transport Commissioners has granted Canadian railroads a 12 per cent interim increase in freight rates. The rate hike became effective July 26 and will remain in effect pending final decision on the railroads' request for a 20 per cent rate advance. Exceptions to the increase are certain grain movements, joint rates between Canada and the United States, and export and import rates to and from Canadian ports. The board also authorized the carriers to increase the present 75 cents minimum charge per shipment to \$1.50. The rate advance is to compensate for higher wage costs and will yield the carriers an estimated \$54,000,000 additional revenue annually.

Poll Indicates 67 Per Cent Favor Single Transport Agency: A poll of transportation executives taken by the transportation department of the United States Chamber of Commerce reveals that 67 per cent favor a single federal transportation agency to handle all regulatory and promotional functions, other than emergency action. The poll also shows that 85 per cent think transportation agencies should be free from control by the executive branch of the government. Of those answering the poll, 72 per cent were carrier representatives,



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20 per cent were shippers and 8 per cent were independent transportation interests. A breakdown of carrier representatives replying shows that 45 per cent were rail, 37 per cent highway, 12 per cent water and six per cent air.

Governor Signs Bill Increasing Truck License Fees: Governor Stevenson has signed the bill increasing truck license fees in Illinois approx-

imately \$28,000,000 annually, effective January 1, 1952. The bill also provides for an additional \$8,000,000 yearly increase in license fees beginning January 1, 1954. The governor also affixed his signature to a bill authorizing the revocation of operating rights of an operator found to be an habitual violator of the state's maximum weights laws.

Wanted: Inventions

(Continued from page 20)

list) for use in mountain and Arctic sleeping bags.

A practical method of destroying tell-tale tracks of men and vehicles on snow fields.

A device that will distribute heat over the human body for exposures at sub-zero temperatures, yet will permit individuals to walk about, work freely, ride or drive in unheated vehicles, or sleep without outer shelter. (The device must be independent of any restricting or heavy electrical power source and be capable of a minimum of eight hours operation without refueling.

A device that could burrow a vehicle-sized hole or tunnel through compacted snow or solid ice to produce rapid-under-snow storage

and protection, yet could leave the surface of the snow flat for camouflage.

A logistical supply system to move liquid fuels and heavy supplies up glaciers that are too steep for normal vehicles and in cases where air lifts are uneconomical or impractical.

An automatic coupling joint for connecting panels of fixed and floating bridges that can be quickly connected and disconnected.

A tool or material which will permit the rapid splicing of military field wires under adverse weather and blackout conditions without disclosing the location of the user by either light or sound.

A quantity production method

for welding commercial unalloyed titanium in military equipment. (Titanium welding thus far has been by laboratory methods which are not practicable for large scale production.)

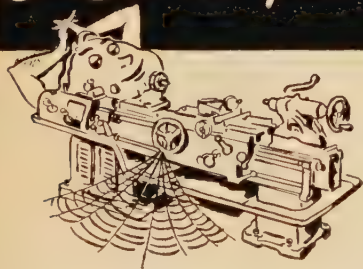
It's hard to estimate the chances of the body heater, the "snow mole," or the glacier climber being invented simply on the basis of such information. However, the odds are that solutions to some of these problems will be forthcoming. Over 200,000 ideas already submitted to the council, it is understandable that many were valueless — or, to put it less bluntly, "ingenious but." There was, for example, the man who had devised a better way to guide planes to a safe landing in pea soup fog. Seen enough polecats on the landing field, he wrote the council, and the pilot will land safe and sound — not by instrument but by nose.

"Wildest" Ideas Tested

Even the wildest ideas are given consideration, however. A prominent zoologist proposed that large bats be equipped with incendiary bombs and then released over enemy cities at night. The Air Force spent close to \$50,000 testing that brainchild and found that it really would work. Released over an experimental town, the bats sought out the darkest attic corners and other inaccessible crannies that were ideal spots for starting a fire. Fortunately for the bats, other incendiary methods proved more efficient — but not before the Army had lost a barracks building into which a bat, mistakenly equipped with a live incendiary, flew in the dead of night!

Of the 13,887 ideas that were studied in detail, 8,615 were classified and made available to the armed services. How many were actually used is a moot question. A council spokesman notes that "reports on inventions put into production are in most cases fragmentary and informal since the council, after bringing a suggestion to the attention of the proper offices, did not follow the idea through development and testing programs. Suggestions on such topics as atomic power, bacteriological warfare, the proximity fuses, and self-guided torpedoes were either retained by the services or put into secret files

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about which no report has been made. Members of the staff believe that an undetermined number of ideas sent by the council to the armed forces were used without the council's knowledge."

Ideas that fail to make the grade the first time may be drawn from the files years later and put to excellent use. This was true of a finger-operated spark generator sent in by an Indiana inventor. When the first bazooka was developed, its major flaw was its battery-operated firing mechanism. Someone recalled the generator and a "dead idea" was quickly revived.

Contributors to the National Inventors Council must, of necessity, work in almost total darkness. Understandably, the military is reluctant to provide more than the barest details about unsolved problems. Lacking what would ordinarily be considered essential information, often without even rudimentary facilities for development work, and almost always completely on his own, independent inventors have nevertheless done an astonishing job. Among council-inspired inventions are: field steam tables, tank ventilating units, life rafts, stills for producing drinking water from sea water, means for refueling planes in flight, signal mirrors, an automatic release device to prevent cargo parachutes from dragging once they touch ground, a kapok substitute, a large number of ingenious packaging methods, a trolley take-off and landing device for small aircraft, a waterproof zipper-type fastener, a new type of concrete reinforcing bar, non-skid shoe soles, and non-inflammable gas tanks.

Work on Electronics

Once a year in a Manhattan hotel ballroom, a group of electronics experts meet to renew acquaintances and recall World War II days when they worked as a team on measures for fouling enemy radar. Several months ago they were joined by several council members who were there on business — specifically, the business of Russian jamming of Voice of America broadcasts beamed through the Iron Curtain. Several sessions later, the council was in a position to deliver to the State Department several suggestions which have already been put to excellent use.

Prior to the invasion of Europe, the council conducted what was probably the most unusual series of railroad conferences on record. Around a table were collected men whose job was to safeguard the nation's rolling stock. Their new job was to devise ways and means of wrecking every European railroad which serviced Hitler's armies. The ideas produced at these sessions eventually became the "bible" for underground workers and American secret agents.

Other get-togethers under council sponsorship resulted in a series of

sabotage methods for the Office of Secret Services. Psychiatrists working with the council devised fearful techniques for shattering enemy morale. Some of the most nerve-shattering rumors that clawed their way through Europe during the war years originated at these extraordinary meetings.

The National Inventors Council is a small federal agency with a tremendous job. It personifies America's faith in its people's inherent ingenuity and inventiveness — invaluable resources in a troubled world.

Trends In Finance and Business

(Continued from page 10)

eral government buying. As of the first of the year, the new construction dollar was worth only 43 cents compared with its 1939 buying power. The same Commerce Department survey established these other relative buying dollars: the nondurable goods dollar has fallen to 51 cents, the durable goods dol-

lar to 53 cents and the services dollar to 67 cents.

One important reason for the sharp depreciation in government buying dollars, the survey discovered, was the high cost of government construction. Another was the sharp increase in labor costs as government employment has shot upward in recent years.

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New Products

TV Viewing Aid

Sylvania Electric Products, Inc., New York, 19, N. Y., believes television viewing will be more pleasant and comfortable with its new development called "Halolight," which tends to reduce the contrast between the bright TV screen and the dark surrounding area. Around the screen is an illuminated frame, the brightness of which can be adjusted for viewing in varying degrees of room light. The neon-type frame of illumination, Sylvania believes, makes the TV screen appear larger and look clearer.

Rubber Synthetic

A "cold" synthetic rubber latex, the first of its kind to approach natural rubber latex in service and wearing quality, has been developed by the United States Rubber Company, New York 20, N. Y. The synthetic is regarded by the company as a major step toward complete independence from Far Eastern natural rubber supplies, since it removes a major bottleneck that has existed since commercial production of synthetic rubber began 10 years ago. Seven varieties of the "cold" rubber latex have been developed by U. S. Rubber; one variety can be used as a 100 per cent replacement for the natural products in the manufacture of foam cushioning and mattresses.

Extra-Tough Tape

A super-strong gummed tape with a tensile strength of 180 pounds per inch of width has been developed by Mid-States Gummed Paper Company, 2515 S. Damen Ave., Chicago 8. The company says the new tape is pliable, safe, easy to handle, and serves as "ideal replacement" for metal strapping, meanwhile reducing labor and material costs to a minimum.

Keyhole Anti-Freeze

Your automobile keyhole will never freeze up with ice or snow, says Elektrik Seal Laboratories, if you squeeze a tube of their liquid anti-freeze into the keyhole before winter. It is neither a graphite

nor a grease, yet the company says the chemical compound will keep outdoor locks of all kinds working even in prolonged temperatures of 30 degrees below zero.

Outsize Spot Welder

Sciaky Brothers, Inc., 4915 W. 67th Street, Chicago 38, have developed "the most powerful spot welder ever built," a three-phase machine with an electrode force adjustable up to 23,000 pounds. It is said to weld two thicknesses of quarter inch aluminum alloys with consistently high-quality results. The machine is also said to exceed the rigid requirements of Air Force-Navy aeronautical specifications involving weld strengths.

Sweeper Attachment

The "Yard Bird" is the appropriate name given a power sweeper that attaches to any fork lift truck of 1,500-pound capacity and up for indoor and outdoor industrial cleaning. The manufacturer, Little Giant Products, Inc., of Peoria, Ill., says the "Yard Bird" sweeps up 80,000 square feet of litter per hour and has its own self-contained spray system for dust control. It is operated by a 6.8 horsepower gasoline engine.

Convenient Binoculars

Binoculars that have ear pieces and thus can be worn like sunglasses have been placed on the market by Henry Hildebrand and Associates, Burlington, Wis. Called "Sport-Oculars," the glasses are lightweight, dustproof and equipped with 25mm precision ground and polished lenses of three power magnification.

Foot Comfort Matting

Back-of-the-counter and production-line workers will be a lot more comfortable, says Ace Hose and Rubber Company, if working on the company's new anti-fatigue floor matting called "Lite Step." The new matting is made of a 1/8-inch corrugated rubber top on a 1/4-inch live sponge rubber base, and it can be cut or manufactured to fit unusual working spaces. The

company is at 1706 S. State St., Chicago 16.

Double-Duty Pump

Bowser, Inc., Fort Wayne, Ind., has come up with a gasoline station pump with hoses on either side, so two cars can be served simultaneously from the same pump. It takes little more space than the conventional single-hose pump, delivers to two cars almost as rapidly.

Battle For Titanium

(Continued from page 14)

"creep," that is, to fail under a constant load, and because there is a tendency to gall. But the metallurgy of titanium is in its infancy, and the possibilities in the countless alloys that can be made are unlimited. Like aluminum and steel, titanium is expected to reach its highest perfection in alloy with some other metal or metals.

Welding has been a troublesome problem, however. The National Inventors Council, in its "Technical Problems Affecting National Defense," had the following to say on this subject. "Before titanium and titanium alloys can be applied widely in the design and production of military equipment certain problems must be solved. For instance a practicable quantity production method for welding commercial unalloyed titanium is required. The welding which has been done thus far has been by laboratory methods which are not practicable for use in production. Experience is also lacking so far in materials and methods of welding high-strength titanium alloys. Likewise there is lack of experience in casting titanium and its alloys. Except for special equipment which will probably be required for welding and casting, it is probable that standard equipment can be used for other steps in the fabrication of titanium and its alloys."

Titanium Metals Corporation warns that successful welding of titanium and its alloys demands that all parts of the metal heated to more than 1000° F must be shielded from active gases or blanketed by an inactive gas, because of the tendency to absorb oxygen, nitrogen and hydrogen. The corpora-

tion says, however, that "titanium can now be quite successfully joined to itself by many of the standard methods used on other materials, provided proper care is exercised in protecting the hot metal during the process. The welding of titanium to other metals is so far unsuccessful, but it is believed that the need is so insistent as to demand a solution in the near future."

Many Attributes

Arrayed against these problems are the proved advantages of titanium in many exceedingly important respects. Its alloys have a much higher fatigue resistance than aluminum; it is a poor conductor of heat; it is quite hard; it has high impact strength, and it has spectacular resistance to corrosion.

Titanium is almost completely impervious to corrosion from sea water, which quality alone would make it a highly valuable addition to the list of structural metals. But Titanium Metals Corporation declares that it is increasingly apparent that titanium may be greatly superior to any other metal in many

chemical process operations. The company reports: "It is best to test titanium under actual service conditions irrespective of what might be disclosed by 'beaker-type' tests. The chemical industry has so far been unable to obtain much titanium for such tests, but it is important to note that where trials are made, titanium often performs far better than anticipated, sometimes dramatically so. For example, titanium had not been considered very useful when in contact with sulphuric acid. Tests by a large chemical concern with process equipment involving sulphuric acid up to 22 per cent at high heat and pressure showed titanium unaffected whereas the best of alloy steels was chewed up in a few hours. The company is now constructing a large operational unit entirely of titanium. Another installation in Texas, heretofore made of non-metallics, involves high concentration of ferrous chloride. Service tests with titanium showed a corrosion rate of 4 mg/dc², whereas even metals such as Hastelloy and Illium G showed rates as high as 22,000 mg/dc². Here

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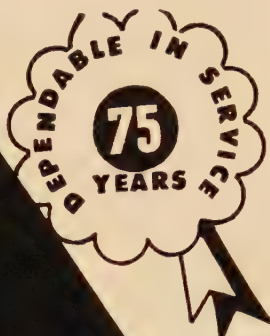
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again an entire production unit is being redesigned using titanium. And, typical of many other growing applications, a large producer of pharmaceuticals has incorporated titanium tubing in equipment heretofore subject to frequent replacement when made with other metals."

Other corrosive materials or elements to which the metal apparently is immune include lactic acid, vinegar, pineapple juice, coffee, tea, and living flesh. Experiments are being made with titanium for sutures, skull plates, bone pins, and dental appliances.

Aircraft Potentialities

Titanium has been called a versatile metal, and only a cursory review of the many places in which it seems to serve better than any other metal or perform satisfactorily where others fail, is enough to make Mr. Magos' remarks about a new industry sound conservative. For example, aviation could use large quantities of light, strong titanium to save weight, and it could afford to pay a relatively high price since each pound of weight saved in an airplane increases its payload capacity to the tune of some \$200 a year. It is generally assumed that the military services are snapping up all available titanium in order to use it in aircraft.

Titanium sponge metal now costs \$5 a pound in so-called larger quantities, and \$7 or more for smaller quantities, while hot or cold-rolled sheets are \$15 a pound. Even at a price of \$1 to \$1.50 a pound for sponge, wide commercial and industrial uses would be found for titanium, the experts say.

At the moment, with defense at stake, there is little titanium for commercial experimentation, but this does not mean that the fight to improve production methods and cut costs is being relaxed. On the contrary, it is being stepped up in intensity with nearly every passing day.

A worthy new recruit has recently joined the ranks of the army fighting the battle of titanium. Crane Company early in July completed a new pilot plant in Chicago for the production of titanium sponge metal and made a successful test run. Crane is a pioneer in the metallurgy of steels and non-ferrous metals, and its engineers are skilled

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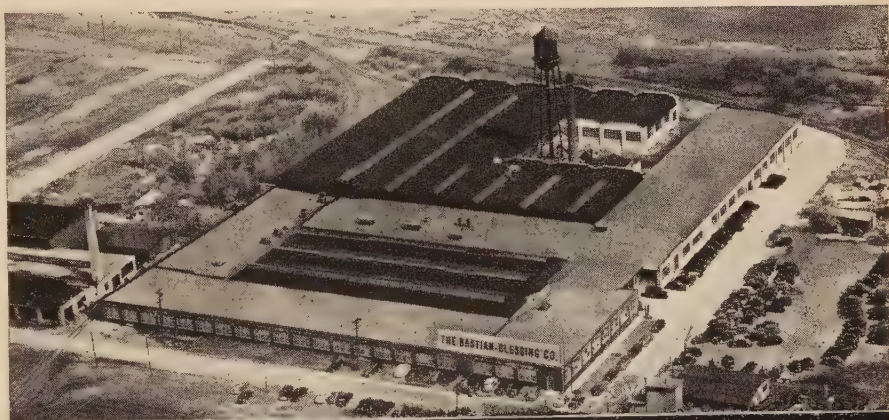
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in operating under high vacuum techniques and at high temperatures. The company built the valves and piping, and related equipment, for the Oak Ridge, Tenn., and Hanford, Wash., atomic energy plants.

Crane's new pilot plant is based on a modification of the Kroll process, but is of the company's own design and construction. The whole purpose of the plant is to find ways to speed up the production of titanium sponge and reduce the cost, consequently it is built so as to permit changing of the process in several ways. The company has a number of ideas it wants to try

out, not only for the production of sponge but also for the consolidation of sponge into solid ingots.

Because of the government's urgent demand for titanium, the Crane pilot plant was scaled up to about ten times the size required for the company's own purposes. The capacity is placed at 1,000 to 2,000 pounds of sponge metal per week, and just about all of the output will be sold to companies producing titanium for defense and atomic energy purposes.

Horizons Titanium Corporation, owned jointly by Ferro Corporation, Cleveland, O., and Horizons Incorporated, Princeton, N. J., has developed a new continuous process for producing titanium sponge, and is reported ready to build a pilot plant. Horizons expects to be able to sell its product at \$1 a pound.

Great progress is being made, and no one now doubts that titanium will succumb eventually to the skill of those that have mastered magnesium, aluminum, and the endless varieties of alloys.

Scarce Materials

(Continued from page 32)

"what the property should be bringing in."

The board's reply: "You're in no worse a position than a lot of other people who've purchased land but can't build on it because of this order."

In another case, however, where a property-owner had shown how he'd borrowed so much money to buy land to build on that he'd lost his own equity in the property by failing to meet loan payments, the board permitted him to go ahead and build. The board conceded that no "substantial" start was made on the new construction. Its grant was based on the belief that the property-owner faced "unreasonable hardship" by being prevented from building on his land.

In handing down decisions, the board doesn't always stick strictly to its own rules. It has been particularly lenient hearing "new and substantial" facts. When it does, however, an industry division official usually sits in.

A relatively small mid-western manufacturer of washing machines came to the iron and steel division to appeal the same order the stove

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maker had — the one limiting a consumer "hard goods" company in the second quarter to 80 pc. of the steel it used in the average quarter of the first half of 1950. This manufacturer also claimed his "base period" production was unusually low — though he didn't have anything as tangible as a strike to back up his claim. He asserted his production suffered because a top official died and another one had to retire because of his health, weakening the company's sales effort so much that it had to curtail production.

The iron and steel division took a dim view of the argument, pointing out that many firms could say their production was down in the "base period" because sales were off. Undaunted, the washing machine maker went before the appeals board—by this time with two defense contracts in hand. There he repeated his sales-off argument, but added another: if you don't give me extra steel to keep my civilian production going, I'll have to lay off people while I'm waiting for delivery on the machine tools I need to fill defense contracts. Then, when I get delivery, I'll lose time looking for new help.

The board pondered at length and finally decided the layoff would be necessary. The washing machine producer got more steel to tide him over until he could get into production on cartridge cases.

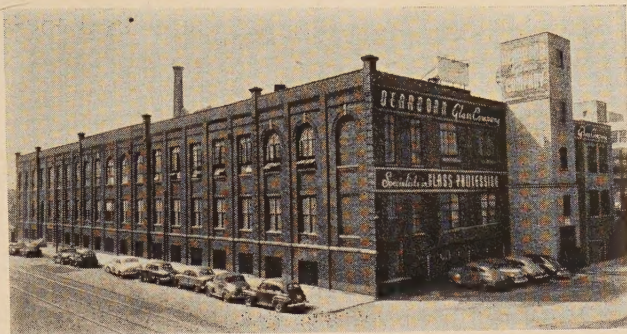
Appeal Procedure

It is relatively easy and inexpensive to appeal a case to the board. If a businessman does not want to come before the Board himself, he may send a lawyer to represent him, providing he so informs the board, or he may rest his case on the written material he submits to the board.

Hearings are supposedly limited to a one-hour presentation by a businessman or his representative. In practice, however, they usually spill over into two or three hours and then take additional time for the board's deliberation.

The board warns that it will get stricter as materials, like nickel, get scarcer. Scarcities, it says, won't affect cases based on "equality of treatment" but they will have to be measured against "financial hardship" and the "public interest."

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A		
A-Z Letter Service	47	Harrington, J. J., & Co.
Acorn Screw Products Co.	42	Agency—J. D. DeVaux Adv.
Admiral Die Casting Corp.	42	Horders, Inc.
Agency—The Advertising Corporation		Agency—Frank C. Jacobi Adv.
Advertising Corp., The	8	I
American Coal Burner Co.	33	Interstate Machinery Co.
Agency—Critchfield & Co.		Agency—Jones Frankel Company, Adv.
Archibald, E. L., Company	33	Iron Fireman Mfg. Co.
		Agency—Joseph R. Gerber & Co.
B		J
Baird & Warner	28	Jackson Press
Agency—Bauder-Baker Inc.		Agency—Allbright Associates, Adv.
Bastian-Blessing Co.	43	James, D. O., Gear Mfg. Co.
Agency—Kirk, Roberts, Thomas, Inc.		Agency—Paul Bowman Adv. Ag'cy
Batney & Childs	33	K
Blackhawk Machine Co.	44	Kedzie Protective Patrol
Boynnton, A. J., Co.	30	Kelso-Burnett Electric Co.
Agency—Marsteller, Gebhardt & Reed, Inc.		Kling Brothers Engineering Wks.
		L
C		L & N Tool Service
Cadillac Glass Co.	35	Agency—Schnell & Associates Adv.
Agency—Tronnes & Co.		Lang Equipment Sales Co.
Calumet Refining Co.	33	Leslie Welding Co.
Chicago Association of Commerce & Industry	4	Lift Truck Service Co.
Chicago Belting Co.	33	Lorenz, George M., Steel Co.
Agency—Spaulding Advertising Service		Lou Steel Products
Chicago, Burlington & Quincy Railroad Co.	37	M
Agency—Reincke, Meyer & Finn		Marathon Electric Mfg. Corp.
Chicago Electric Co.	34	Marsh & McLennan, Inc.
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Conkling, Price & Webb	27	Agency—Patton, Hagerty & Sullivan, Inc.
Agency—Vaughan & Spencer, Inc.		N
Controller Service, Inc.	47	Nation Bilt
Costello, George, & Co.	44	National Pesticide Co.
Craft Mfg. Co.	45	P
D		Pedersen's Protective Patrol
Dearborn Glass Co.	45	Peoples Gas Light & Coke Co.
DeLew, Cather & Co.	29	Agency—Needham, Louis & Brorby, Inc.
Doering, C., & Son, Inc.	40	Personnel Laboratory, The
Donnelley, Reuben H., Corp.	25	Pesticide Co.
Agency—N. W. Ayer & Son, Inc.		Phipps Industrial Land Trust
		Agency—Jewell F. Stevens Adv. Co.
E		R
Efengee Electric Supply Co.	I.B.C.	Red Star Inn
Agency—Tronnes & Co.		Rice, Florence, Secretarial Service
Eggert, Edwin O.	33	S
Elstu Lamp Mfg. Co.	42	Sievert Electric Co.
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Agency—Critchfield & Co.		U
G		United Air Lines
Garco Mfg. Co.	44	Agency—N. W. Ayer & Son, Inc.
Gold Seal Liquors, Inc.	24	V
Great Lakes Varnish Works	44	Van Vlissingen, J. H., & Co.
Greenview Mfg. Co.	44	Agency—Jewell F. Stevens Adv. Co.
H		W
Haines Co., The	40	Walker-Jimieson, Inc.
Hargrave Secret Service	47	Weiss Steel Co., Inc.

The financial hardship or public interest, the board explains, will have to be greater as materials become scarcer.

Is the board worried that with all the decisions involved in the company-by-company allocation under the Controlled Materials Plan it will be snowed under with appeals? Not yet. Board members think they'll be able to handle the work all right, especially since most of the additional load will go to the industry division rather than to them. At any rate, they say that if appeals begin to backlog, they may go out and hire three more members to sit as a separate, though complementary, board. That would make two boards within a board hearing twice as many cases.

Board Personnel

The board is now staffed by a lawyer, a labor consultant and a businessman. All served in similar posts in World War II's War Production Board. The lawyer is Board Chairman T. Munford Boyd, a Charlottesville, Va., lawyer before World War II, and later a state judge. Although blind, Mr. Boyd takes his own notes in braille—about as fast as a good secretary can take shorthand, incidentally.

Frank J. Peterson, the labor consultant, was an organizer for the United Association of Plumbers and Steamfitters (AFL) before the war since then has served with the U.S. Treasury Department in labor union relations.

The businessman is Jack M. Rorimer, former vice president of Cleveland's Empire Plow Company and city manager of Oak Ridge, Tenn.

Before bringing their problems to this panel, firms are required to submit rather detailed reports on what has transpired previously. They must tell the board in writing:

- (1) The name of the firm, its address and the nature of its business.
- (2) The nature of the NPA action appealed from, including, but not limited to, its date, case number and the order or regulation under which the appeal was taken.
- (3) Grounds of the appeal.
- (4) Copies of documents evidencing the NPA action from which the appeal is taken.
- (5) A statement as to whether or not a hearing is desired.

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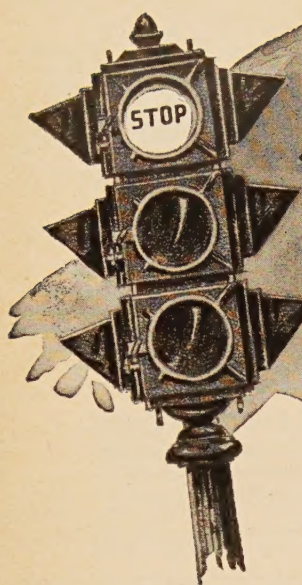
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STOP ME-IF—

Sandy—"McPherson's a cheat and I'm not playing golf wi' him again."

Andy—"How's that?"

Sandy—"Weel, how could he find his lost ball a yard frae the green when it was in my pocket?"

Customer—"You're giving me a piece of bone."

Butcher—"On the contrary, madam, you are paying for it."

The teacher was holding an oral exam in grade school.

Teacher: "Willie, tell me what you know about George Washington—was he a soldier or a sailor?"

Willie: "I think he was a soldier."

Teacher: "Why do you think he was a soldier?"

Willie: "I saw a picture of him crossing the Delaware—and anybody who'd stand up in a rowboat ain't no sailor."

Golf Pro: "Now just go through the motions without driving the ball."

Beginner: "That's precisely the trouble I'm trying to overcome."

Strolling through the card room of a businessman's club, a member was surprised to see three men and a dog playing poker. Pausing to watch, he commented on the extraordinary performance of the dog.

"He's not so smart," the dog's owner said in disgust. "Every time he gets a good hand he wags his tail."

"Just what have you done for humanity?" asked the judge before pronouncing sentence on the pickpocket.

"Well," said the confirmed criminal, "I've kept three or four detectives working regularly."

Jim: "Say, Joe, can you tell me why there are fewer railroad accidents than automobile accidents?"

Joe: "Well, it might be because the engineer isn't always huggin' the fireman!"

A lady bought a parrot from a pet store, only to learn that it cursed every time it said anything. She put up with it as long as she could, but finally one day she lost her patience.

"If I ever hear you curse again," she declared, "I'll wring your neck."

A few minutes later, she remarked rather casually that it was a fine day. Whereupon the parrot said, "It's a hell of a fine day today." The lady immediately took the parrot by the head and spun him around in the air until he was almost dead.

"Now then," she said, "It's a fine day today, isn't it?"

"Fine day!" sputtered the parrot. "Where the hell were you when the cyclone struck?"

Two drunks sat on the curb meditating. One spoke—

"Watsch your wife shay when you shtay out late like thish?"

"Haven't got a wife."

"Then watsch idea of shtaying out so late?"

Two farmers were sitting on the front porch of the general store when a slicker drove up in a flashy convertible. "Hey, you," yelled the driver, "how long has this town been dead?" "Can't be long," snapped back one of the natives: "you're the first buzzard we've seen."

"At her request you gave up drinking?" "Yes."

"And you stopped smoking for the same reason?"

"I did."

"And it was for her that you gave up dancing, card parties, and billiards?"

"Correct."

"Then why didn't you marry her?"

"Well, after all that reforming, I decided I could do better."

My wife changed a lot after we were married: my habits, my friends, and my hours.

The young man who had been calling frequently at last spoke to Mabel's father about marrying the daughter.

"It's a mere formality, I know," he began, "but we thought it would be pleasing to you if it were observed in the usual way."

"And may I inquire," the father asked, "who suggested that asking my consent to Mabel's marriage was a mere formality?"

"Mabel's mother."

A drunk who had wandered into a cemetery at night and then had stumbled into an open grave was screaming for help at the top of his voice. Hearing his cries in the darkness, another drunk staggered over to the grave to investigate.

"Help, help," hollered the first drunk, "get me out. It's cold down here!"

"Sure is, buddy," replied the second drunk, walking away, "they forgot to cover you up."



"Mister, can you spare a nickel for a sip of coffee?"